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# Clinical Medicine and Surgery

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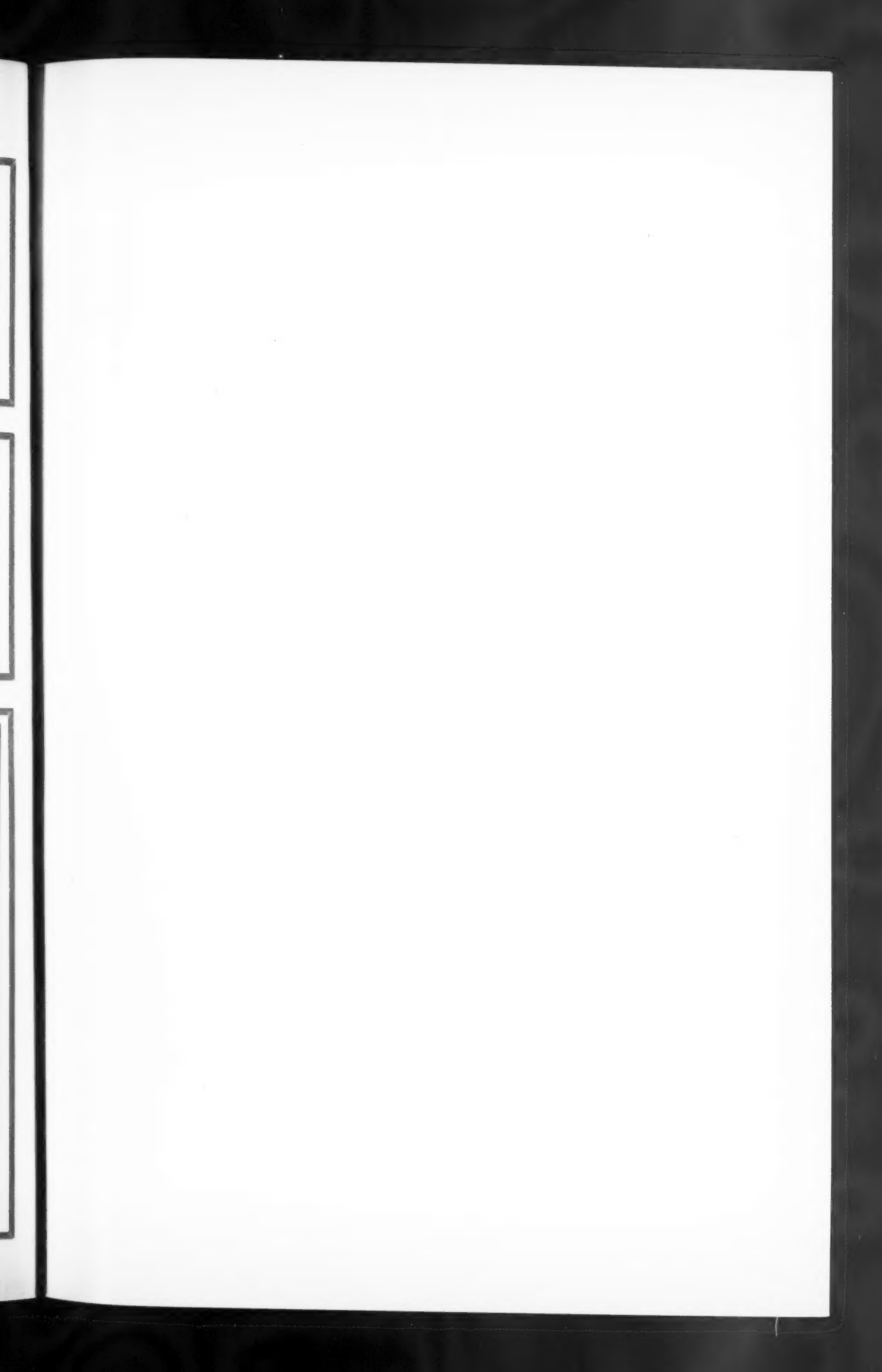


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**CHARLES BELL, K.H., F.R.S.L. AND E.**  
ANATOMIST, SURGEON, NEUROLOGIST



# CLINICAL MEDICINE AND SURGERY

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## Sir Charles Bell

**M**EDICINE and Surgery are both largely arts, even today, and were more definitely so a century ago than they are now. It is really not strange, then, to find that a number of men who have made high names for themselves in the Healing Art, have also been artists in the more popular understanding of the word. Charles Bell was one of these.

Charles was born in Edinburgh, Scotland, about the time when the thirteen American Colonies were becoming very peevish at the tactics of their British sovereign (1774). His father was a Scottish Episcopal clergyman, the Rev. William Bell, who had already begotten another son who was to rise to fame.

The schools of Edinburgh gave Charles his basic education and because, perhaps, his elder brother, John, was turning his thoughts toward a surgical career, he became intensely interested in anatomy and, when John opened a school for the teaching of that subject, in 1790, Charles not only became a pupil, but assisted his brother in his demonstrations, as well as in his practice of surgery.

After nine years of such work, he had become so proficient as to gain his membership in the Edinburgh College of Surgeons and, soon afterward, an appointment as one of the surgeons of the Royal Infirmary.

A few years later, the senior and junior members of the College became involved in some sort of petty controversy, which so disgusted Mr. Bell that he left his native city for London where, in 1804, he began giving lectures on anatomy in his own house, but soon formed an association with Mr. Wilson, F.R.S., and became one of the most popular lecturers in his school in Great Windmill Street.

Bell had been much interested in the surgery of gunshot wounds and, in 1809, he had a chance to study such cases at first hand, for which purpose he went to the South of England and assisted in the care of the wounded men brought back from the battle of Corunna. Another similar, but greater, opportunity came with the battle of Waterloo (1815), and Bell was one of the first surgeons to reach Brussels, where he was placed in charge of a hospital. On these and many other occasions, he demonstrated his right to be classed as one of the foremost surgeons of the nineteenth century.

It was here that the artistic genius, which had made his "System of Dissections" (1789) and "Engravings of the Brain and Nervous System" (1802) popular, by reason of the exquisite illustrations which he made for them, served him and the world in good stead, for the drawings which he made of the wounds he saw and treated

have been called the finest specimens of water colors in the English anatomic school. All of his books were embellished with remarkable drawings and sketches, all his own workmanship.

Bell became a Member of the English College of Surgeons, in 1812 and, soon after, was appointed professor of anatomy. Later he was placed at the head of the newly established University of London and, in 1836, he was called to the chair of surgery in the University of Edinburgh, having, by that time acquired an international reputation.

This clever and versatile man never acquired the clinical practice to which his talents entitled him, because he was more interested in investigation than he was in clinical surgery; but these researches of his have given him a place among the Immortals where, strangely enough, he is chiefly remembered as a neurologist.

In 1811 Bell discovered, for the first time, that there was a difference in the functions of the anterior and posterior roots of the spinal nerves. He followed up these studies earnestly but, because of his aversion to vivisection, it was not until 1826 that he acquired a clear conception of the distinction between sensory and motor nerves.

In 1829 he demonstrated that the fifth cranial nerve is sensory-motor and discovered the motor nerve of the face, paralysis of which is known, to this day, as "Bell's palsy." All of his neurologic studies were published in a book in 1830.

In the midst of these varied activities, Bell found time to make a careful study of cancer, and the clinical picture and treatment recommended, which he published in 1820, is still, with the exception of our knowledge of radium and x-rays, perfectly sound today.

Bell was a simple, genial, kindly man, with a keen sense of humor, and something of a dandy as to his dress. He was extremely popular and much sought after during his years in London and was made a

Knight of Hanover, in 1829. His eventful and fruitful life, which exercised an immense influence on the surgery of his generation and contributed much to the permanent fund of knowledge, came to a close in 1842, he being in his sixty-eighth year.

The essential character of Science resides, not in the nature of the facts with which it deals, but in the method of attack which it employs.—Dr. Bernard Hart.

### THE DISGRACE OF SMALLPOX

THESE United States are supposed to constitute a civilized country—in fact, we boast of being "the most enlightened nation in the world." We look down upon the poor, benighted natives of India with pitying horror, as a race which is scarcely human. If the truth were known, our attitude toward all "foreigners" has more than a touch of smug condescension.

And yet, those "pitiable barbarians," the Indians, are the only people in the world who have a higher deathrate from smallpox than ours. Using this as a basis—and who shall say that it is an unreasonable index of progress—the other civilized peoples of this globe have sound reason for classing us with the teeming hordes of our brown-skinned brother Aryans who live between the Arabian Sea, the Himalayas and the Bay of Bengal.

In 1927, so reports the United States Public Health Service, 35,000 men, women and children died, horribly and needlessly in the United States—murdered by the carelessness or fanaticism or both which prevents every citizen from being vaccinated, in childhood, against this scourge.

In 1928, the story was even more disastrous, for 38,000 rendered up their lives upon the altars of ignorance and cultism. And this was only the number who died! In Illinois alone there were 3,000 more cases than the aggregate for France, Germany, Belgium, Italy, Poland, Switzerland, the Netherlands, Cuba, the Panama Canal Zone, the Philippine Islands and Japan!

If every physician, in the cities and hamlets of our Country, would broadcast this

shameful story to all and sundry, with the caustic comments which ought to rise, unbidden, to his tongue at the thought of this sacrifice of the innocent and uninstructed, one has confidence to believe that the facts would shock the national conscience to the point where it would bring us into line with the intelligent thought of the world in this outstanding feature of preventive medicine.

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The supreme function of the medical profession is to educate the public in the laws of health, and so to insure a healthy and happy community.—Sir W. Arbuthnot Lane.

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### KNOWLEDGE AND CULTURE

**W**HAT do we hope to gain by the constant effort we put forth—the unending struggle with the circumstances of our environment, including other people and our own physical bodies, which fills the waking hours of most of us and, not infrequently, encroaches upon the periods which should be devoted to recreation or sleep or both?

Do we seek wealth, fame, power, position, love, excitement or some of the other things for which most persons seem to be scrambling very industriously?

Perhaps; but it is rare to find a man who will declare that one or more of these achievements is the ultimate aim and object of his life. And when he does make such a statement he is probably a liar or is self-deceived.

The thing we want is satisfaction—happiness—which will endure, to warm and illuminate our days as long as we live. If we seek money, it is in order to gain physical comfort and relief from the fear of poverty; fame is pursued for the satisfaction of our sense of personal importance; power, that we may mold men and circumstances to our will and bring the world "nearer to our hearts' desire"; love, that we may experience the joys of mutual sympathy and cooperation. All these things we strive for in the belief that they will make us happy.

But, in the last analysis, happiness is not

something which can be extracted from life by force, nor bought for money; neither can it be pursued directly. It is a by-product of certain ways of living—certain kinds of activity and points of view.

Physical health and an eagerness to serve others may be assumed as basic ingredients in this formula though, as a matter of fact, the absence of one or both of them does not, always and of necessity, bar a man from the attainment of that inner satisfaction which is the real crown of living.

While it is obviously impossible for any one to build for another a ship of life which is sure to bring him to the harbor of his dreams, there seem to be two foundation stones upon which the edifice of happiness can be erected with a reasonable degree of certainty. These are knowledge and culture.

Knowledge means more than simply a working familiarity with the tools, technic and nomenclature of any profession or trade. In its broad sense it implies an understanding of the facts and phenomena of the universe, whether these be material, emotional, intellectual or spiritual. Not that all of this vast field is open to us at this time; but there is scarcely a man who could not acquire more knowledge than he now possesses, and profit enormously thereby.

All knowledge has value; and if certain forms of it seem unprofitable and tiresome to us, that is simply an index of our own short-sightedness and inability to perceive its relationships to other items of information which we already possess and to the business of daily living. The greater the mass of knowledge that seems vital and interesting to us, the broader is our range of vision. Some penetrating philosopher has remarked that education consists in increasing the number of points at which we touch life, and, upon consideration, there is much merit in that suggestion.

Satisfaction—happiness—can, then, be found, in one direction, at least, as a

result of the acquisition of a widely diversified and well digested fund of knowledge, especially when it is put to work in the service of life and it thus develops, at last, into wisdom.

Culture, that faculty or attribute which is desired by all who have emerged from the developmental stage of barbarism, may be defined as an instinctive appreciation of the best in all the fields of life. Like happiness, it cannot be achieved by seeking it directly, but is, perhaps, most readily found by acquiring and digesting knowledge along many lines and by doing one or a number of things extremely well. The master workman recognizes master work.

The cultured man, because of his power to understand and appreciate the best, seeks the worthy and beautiful things and has no time to waste in belittling or ridiculing the efforts of those whose wisdom and skill are still in process of development; and he who sneers at sincere work, because it does not measure up to his standards, lacks culture, whatever other attributes he may possess.

Because of his wide and varied store of knowledge, the cultured man has a broad and catholic understanding and sympathy and a quick and versatile interest in the affairs of men. The lack of these faculties stamps a man as a provincial, whether he live in a cross-roads hamlet or in the mathematical center of Manhattan. He who can talk nothing but "shop" is a provincial, no matter what letters he is entitled to write after his name or what position of authority he may hold, and his actions, his emotions and his thinking are cramped and hampered by his narrow outlook.

The provincial, realizing, subconsciously, his own limitations, must constantly be bolstering up his position by loud and categorical statements and untenable generalities. He must emphasize his superiority to the "common herd" by disagreeing with it on all matters, even the most trivial. He will not listen to an argument, no matter how logical, which runs counter to his

preconceived ideas. In a word, he is wholly lacking in a true sense of humor.

The man who takes himself or his work or both so seriously that he cannot laugh at them, on occasion, like a bystander, may be a great specialist or a great scholar, but he is certainly not a cultured man.

If happiness results, as has been said, from an inner sense of enlargement and capacity, it is almost surely out of the reach of the man of limited knowledge and narrow horizons. Joys and pleasures, of a more or less ephemeral sort, he may have, but the solid and enduring happiness which makes life a glorious and satisfying adventure, rests firmly upon the two unshakable pillars of knowledge and culture.

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He who looks upon all living beings as upon himself, sees.—Sanskrit Proverb.

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#### PROMISCUOUS CIRCUMCISION

NATURE may, possibly, make mistakes, at times, though we have never seen any of Her works which we were convinced were superfluous or ill adapted to their purposes. It seems much more reasonable to believe that men—even wise ones—may sometimes be in error.

One of the most frequent and, we feel, unjustifiable, attempts of men to improve on nature is the practice of promiscuously circumcising all male infants whose parents can be cajoled or browbeaten into permitting the sacrifice of a part of their little boys' anatomy which was put there for a good and sufficient purpose and whose removal is, not infrequently, followed by unpleasant results in later life.

So common has this operation become, and so effective has been the propaganda in its favor, that even normally intelligent persons look upon it as a legitimate and worthy part of the service rendered in a first-class lying-in hospital.

What is the basis of this custom? Laziness, chiefly, except, of course, when the operation is performed as a religious rite. It is easier for the surgeon to cut the fore-

skin off than it is to treat it conservatively, as recommended in the abstract on page 154 of the Feb., 1930, issue. It is easier for the mother or nurse to bathe the infant or child when no special attention need be given to the cleanliness of the penis.

A neglected prepuce is sometimes—but rather rarely—a source of annoyance or even danger; but so are the teeth and the toenails. Would we think of removing these organs from a child because they may, later, come to be a source of annoyance or even illness?

The prepuce has a function to perform—in fact, two functions: It protects the delicate mucous membrane of the glans, where many of the genital corpuscles are located; and it carries, on its own inner surface, a number of these organs of sex sensation. Its removal may seriously interfere with this highly important function in later life, even resulting, at times, in impotence, with all its distressing sequels, and almost always in a serious diminution of this sensation, whose preservation has much to do with domestic happiness. It would not be at all fantastic to consider the wholesale slaughter of foreskins as one of the factors in the increase in the number of divorces.

The same results obtained by circumcision (except the elimination of the necessity for washing the penis regularly) can be gained by less radical measures, and we feel that male infants should be given this chance, even at the cost of a little more time and trouble on the part of the physician and the mother.

When an adult man feels that the organ under discussion is not worth the effort it takes to keep it in a healthy condition, he should, of course, be permitted to part with it, the same as he can give up his teeth or his hair, if these annoy him. And then there are, occasionally, surgical conditions which demand its removal, as there are those which require the amputation of a breast or a hand.

What we heartily protest is the routine, thoughtless and unnecessary mutilation of a large percentage of the male infants of those non-Jewish families whose status is sufficiently good (or bad) to permit the use of a hospital at the time of confinement, under the guise of a hygienic measure and the impulse of a superstition.

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But Faith, fanatic Faith, once wedded fast  
To some dear falsehood, hugs it to the last.  
—Thomas Moore.

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### BLOOD CHEMISTRY IN SYPHILIS

**M**OST physicians seem to think of syphilis solely in terms of the lesions produced by the specific spirochetes and, possibly, by their toxins.

But this disease is so protean in its manifestations, so widely destructive in its effects and produces, at times, such mysterious departures from normality, that thoughtful persons must recognize that we are very far from knowing all there is to be known about it.

The studies which Drs. Isadore Rosen and Frances Krasnow, of the department of biologic chemistry, College of Physicians and Surgeons, New York City, have been making for several years, on the chemistry of the blood in syphilis, should not be surprising, but are of great interest.

These investigators have reported (*Archiv. Dermatol. and Syphilol.*, April, 1926, and Aug., 1929) that the blood-cholesterol is low in 100 percent of patients with untreated, primary syphilis; in 50 percent of untreated secondary cases; and in 25 percent of untreated tertiary cases. After treatment, the cholesterol content of the blood of all primary cases rose to normal or above, while in some of the secondary and tertiary cases it remained low. The blood-cholesterol in 82 percent of treated cases of congenital syphilis was normal.

On the other hand, they report that there is a decided tendency for the lecithin content of the blood of syphilitic patients to be high.



In studying the blood-cholesterol in other diseases having cutaneous manifestations, they found it high in psoriasis and dermatitis venenata and normal in acne, seborrheic dermatitis and dermatophytosis.

These matters may sound highly academic and uninteresting to many clinicians, but, who knows how soon some enterprising and scientifically-minded practitioner—like Banting, for instance—will put them to work in diagnosing syphilis or checking the results of treatment?

In any case, even though no practical, clinical results of these studies appear immediately, it is an aid to clear thinking, by physicians, to realize that syphilis is something more than simply a protozoan infection of the tissues, and that it pro-

duces definite and perhaps important, changes in the chemistry of the blood. In fact, there is no reason to believe that, even now, we have found out all of the chemical and biologic changes for which these organisms are responsible. These studies may be only the first of a series which will demonstrate to us the far-reaching possibilities for harm, possessed by these ubiquitous destroyers of human health, efficiency and happiness.

In these days of astonishing progress in the discovery of truth, we need to keep open minds and to be alert for opportunities to translate the findings of the research laboratories into methods for ameliorating the condition of the patients who commit their health and lives to our charge.

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#### WILLIAM HARVEY'S PHILOSOPHY

*True philosophers, who are only eager for truth and knowledge, never regard themselves as already so thoroughly informed, but that they welcome further information from whomsoever and from whencesoever it may come. Nor are they so narrow-minded as to imagine any of the arts or sciences transmitted to us by the ancients, in such a state of forwardness or completeness, that nothing is left for ingenuity and industry of others. On the contrary, very many maintain that all we know is still infinitely less than all that remains unknown.*

*Nor do philosophers pin their faith to others' precepts in such wise that they lose their liberty, and cease to give credence to the conclusions of their proper senses. But even as they see that the credulous and vain are disposed at the first blush to accept and to believe everything that is proposed to them, so do they observe that the dull and unintellectual are indisposed to see what lies before their eyes, . . . And then the studious and good and true never suffer their minds to be warped by the passions of hatred and envy, which unfit men duly to weigh the arguments that are advanced in behalf of a truth. They do not esteem it discreditable to desert error. I profess both to learn and to teach anatomy, not from books but from dissections; not from the positions of philosophers but from the fabric of nature."—From the Dedication (Addressed to his friend, Dr. John Argent, President, Royal College of Physicians, 1625—1663) of Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus, 1628.*

# LEADING ARTICLES

## Endocrine Factors in Common Colds\*

By JAMES H. HUTTON, M.D., *Chicago, Ill.*

**W**EBSTER'S "New International Dictionary" defines a common cold as a disordered condition, usually of the upper respiratory tract. This is perhaps a more comprehensive and correct view of this syndrome than is taken by our text books on medicine. Just now it is popular to regard the etiology as being entirely infectious and we are urged to stifle a cough and smother a sneeze, which is very good advice indeed, not only from a public health, but also from a social standpoint.

In general, I do not hold to the orthodox view, that common colds are always due to an infection of the upper respiratory tract. Infection may, and doubtless does, play a part in most colds at some stage or another, but it is not the only factor and I doubt if it is the most important one.

All colds are not alike and the same person may have a different variety of cold at different times. For example: Some ten years ago I saw a patient who had a cold and a headache, which persisted over several weeks. Some of my friends working in rhino-laryngology questioned whether there might not be a sinusitis. As they were uncertain about this, the patient's history was carefully reviewed. It was discovered that a heavy meat diet was being indulged in. At the same time it was recalled that Dr. Allen Eustis, of New Orleans, had demonstrated that much harm may come from an overindulgence in proteins. Consequently, this patient was put on a low-proteid intake and meat was entirely stricken from the diet. The cold promptly subsided.

Later the same patient developed what was apparently a similar cold, but removing meat from the diet had no effect on that attack. Finally, in desperation, a vaccine was administered and the cold promptly disappeared.

After another year or so a third cold developed and vaccine was again resorted to, without result; nor did reducing the proteid in the diet have any effect. Then it was discovered that the patient had an ovarian insufficiency, due to x-ray destruction of the ovarian function. The administration of ovarian residue was coincident with the prompt disappearance of that cold.

### GLANDS INVOLVED

Three endocrine glands are frequently involved in colds: The thyroid, the parathyroids and the ovary. The pituitary may be involved, but less frequently. The pituitary seems especially susceptible to mumps and whooping cough, as is shown by the frequent stoppage of growth in stature and the development of obesity of the girdle type, following such infection.

Some years ago, Dragsted, at the University of Chicago, showed that the parathyroids were intimately concerned with the neutralization of toxin arising from the proteolytic action of bacteria in the bowel and that they were involved, also, in the neutralization of toxin arising from muscular activity. Luckhart, in the same laboratory, showed that the parathyroids are intimately concerned in the regulation of the calcium metabolism of the body and also with the changes taking place during the menstrual periods and pregnancy. The theory has also been advanced that they are regulators of the acid-base equilibrium of

\*See the Voting Coupon on advertising page 48.

the body. The patient just cited, whose cold was relieved by reducing the proteid intake, may have been suffering from parathyroid insufficiency, but no calcium determination was made at that time.

Several years ago I saw a woman who had rhinitis, bronchitis, coryza and whose maxillary sinuses were filled with mucus. The rhinologist to whom she was referred said that the sinuses were not the seat of ordinary inflammation, but that they acted as a sort of cistern, into which a large amount of mucus was poured. This condition persisted for many months and was unaffected by any measures recommended in textbooks or by kind friends. Finally, a determination of her blood calcium showed it to be only 7 mgm. per 100 cc. of blood. Calcium was promptly given, intravenously, with startling results.

This condition, which had been immune to all previous efforts on our part, subsided so promptly as to be little short of marvelous. Subsequent colds in this patient have always been benefited by the administration of calcium. This has been given by mouth, except during the first cold. I usually give the lactate, in teaspoonful doses, three times a day. It is well to add three drams of lactose to the same glass of water, as it not only neutralizes the unpleasant taste of the calcium, but also assists in changing the intestinal flora to the aciduric type.

Hypothyroidism has long been known to be accompanied by congestion of the upper respiratory tract. These patients sometimes develop asthma-like attacks, which can be cured by the use of thyroid. This was probably the basis of the thyroid cure for asthma which was announced some years ago. I do not believe that any particular kind of cold would be recognized as being due to hypothyroidism. To discover this condition, the patient, and not his cold, should be examined. If the condition is discovered, it should be relieved by appropriate treatment. If a cold accompanies it, the cold will undoubtedly be relieved by such treatment.

A brief resume of the signs and symptoms of this condition follows:

#### HYPOTHYROIDISM

##### Subjective complaints:

Loss of strength and endurance; loss of "pep"; neuritis-like pains, sometimes resembling those of tabes; retarded mental



Fig. 1.—A Woman whose Face shows the Typical Signs of Hypothyroidism. She also has Eczema of the Palms.

processes; cold extremities and sensitiveness to cold; catarrh of the upper respiratory tract; asthma; stiffness of muscles and joints, worse in the morning; Tinnitus; catarrhal deafness; vertigo.

##### Physical findings:

The skin is dry; in color it is pale, like alabaster, or yellowish, like parchment, with a flush over the malar prominences. The hair is dry and brittle on the head, scant in the axillary and pubic regions and frequently missing on the extremities. The outer thirds of the eye brows are thin. The nails are brittle, ridged and contain white spots. The teeth are of poor quality; if the condition began in infancy they are irregularly placed. The bones are slow in developing and the epiphyseal lines are slow in closing. This condition sometimes causes the slow healing of fractures.

##### Distribution of fat:

Padding is present on the dorsum of the hands and feet, fingers and toes and in the supraclavicular spaces and dorsal cervical area. There is edema of the upper lids, with narrowing of the palpebral fissures; also thickening of the lips. A slow pulse, slow respiratory rate and lowered basal metabolic rate are in evidence.

You will note that the only laboratory procedure mentioned is the determination





Fig. 2.—Hypopituitarism of Both Lobes. Note the Short Stature and Short, Tapering Fingers. The Obesity Shows a Distribution of both Pituitary and Thyroid Types.

are apt to have, not only a dry skin which chaps easily in cold weather, but also dermatoses of various kinds, especially eczematous areas.

Figure 1 shows a woman who has had eczema of her palms for many years, though, apparently, every possible etiologic factor had been investigated except the endocrine one. She had the usual signs of hypothyroidism and her basal metabolic rate was minus 20 percent.

Figure 2 shows a youngster who has the characteristic thyroid obesity from head to foot, with padding on the dorsums of her hands and feet, cuffing about her wrists and ankles, padding in the supraclavicular spaces and in the dorsal cervical region. She has a full, round face, double chin and edema of the lids, producing a narrowing of the palpebral fissures. In addition to this, she has folds on the lateral aspects of her thorax, with considerable girdle obesity, indicating involvement of the posterior lobe of the pituitary. Her short stature, short, pointed fingers and delayed puberty indicate hypopituitarism of the anterior lobe. She was troubled with almost constant colds, which were relieved by the

of the basal metabolic rate.

The other signs mentioned can be determined very quickly by inspection and palpation. If the facilities for determining the metabolic rate are not at hand, the presence of thyroid deficiency can be determined by the administration of small doses of thyroid, noting the size of the dose necessary to produce tachycardia, tremor and nervousness.

Such patients

treatment indicated; i.e., thyroid and pituitary therapy.

Some years ago, I saw a gentleman having a full, round face, from which the lines of expression were almost entirely obliterated, and whose eyebrows were almost missing in their outer third. His short stature, the size and configuration of his hands and his obesity indicated, also, an involvement of the posterior lobe. He had marked hypertension and was markedly over weight. His basal metabolic rate was minus 7 percent.

I have noticed many times that patients exhibiting signs of hypothyroidism and also hypopituitarism of the posterior lobe, have



Fig. 3.—Same Patient as in Fig. 2, showing Appearance of Face and Hands in more Detail.

basal rates within normal limits. This gentleman, in spite of his nearly normal rate, took 10 grains (650 mgm.) of thyroid per day, over a period of several weeks, without exhibiting signs of thyroid intoxication; but his obesity disappeared and his hypertension also, his blood pressure declining from 185/105 to 150/85.

This man was lost sight of for three or four years, when he again came in with obesity and hypertension (220/120). He was again put on thyroid medication, with a moderately restricted diet, especially the proteid intake. His weight promptly came down to normal and his blood pressure to

150/85. This same experience was reported again some three years later.

Do not misunderstand me. Thyroid therapy is not, in my opinion, a treatment to be used indiscriminately for hypertension; but if a patient has hypertension and hypothyroidism, then by all means correct the thyroid condition. By appropriate therapy, it is possible that the hypertension will also be favorably affected. The explanation for a normal basal metabolic rate, in the presence of hypothyroidism and hypopituitarism of the posterior lobe, is unknown to me.

#### OVARIAN INSUFFICIENCY

##### Etiology:

1. Heredity.
2. Infections.
  - A. Local, in the pelvis, as gonorrhea or puerperal sepsis.
  - B. General, as influenza, tuberculosis or syphilis.
3. Trauma, such as operations on or about the ovaries.
4. Disturbances of other endocrine glands—thyroid; pituitary, anterior lobe; thymus; adrenal cortex (?)

##### Symptoms:

Dysmenorrhea; abdominal pain; nausea and vomiting; headache, related to the periods; backache, usually lumbar; irregularity in the occurrence and character of the menses; numbness of the extremities; nervousness; hot flashes; mental depression; mental and physical sluggishness; lack of strength and endurance; amenorrhea; somnolence; "cold" or sore throat with the periods; insomnia, occasionally.

##### The Diagnosis is based on the following:

History, which includes: Onset of menstruation; regularity or irregularity of the flow; pain, where, when, how relieved by appearance of or cessation of the flow; onset of symptoms—at puberty; following some operation; following infection, in pelvis or general, such as "flu"—relation of symptoms to periods—relieved or aggravated at that time—symptoms, as enumerated; physical findings; exclusion of other conditions.

##### Differential Diagnosis of ovarian insufficiency must be made from:

1. Hypopituitarism of the anterior lobe.
2. Persistent thymus.
3. Hypothyroidism.

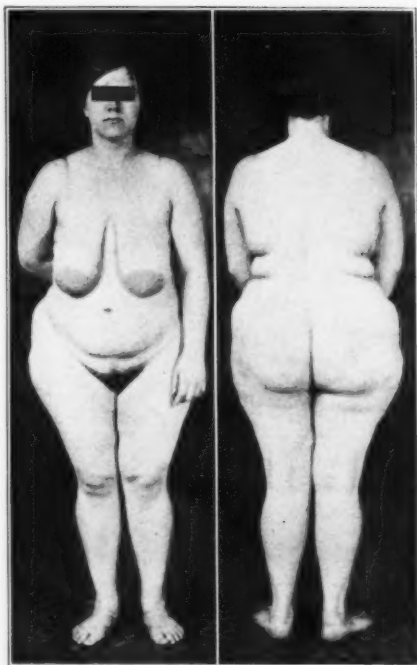


Fig. 4.—This Girl had Hypopituitarism of the Anterior Lobe before Puberty, as Indicated by her Stature and Configuration. The Trochanteric Fat Pads Indicate Ovarian Insufficiency, which is Secondary to the Pituitary Deficiency. Her Obesity Indicates Deficiency of the Posterior Lobe, which Began in September, 1928.

Fig. 5.—Same Patient as in Fig. 4, Posterior View.

4. Nervous and mental disturbances.
5. Tuberculosis and other wasting diseases.

Not every menstrual irregularity is due to ovarian insufficiency. The history of the patient exhibited in Figures 4 and 5, shows that her periods were always regular. They began at the age of 16. In the past year she had a period in December, one in the following May and July, skipped August and September, had one in October and another in November after she came under treatment. Her short stature and small hands, with their pointed fingers, indicate hypopituitarism of the anterior lobe; while the obesity is of the posterior-lobe type.

Under the influence of the pituitary medication, her intermenstrual periods decreased to 35 days; her weight decreased 15 pounds in one month; the circumference of her abdomen decreased 3 inches; about her trochanters, 4 inches; while the circumference of the thigh, close to her body, decreased 7 inches. During this time she

was walking from 5 to 15 miles daily and showed every indication of feeling better and experiencing a general improvement in her health.

Figure 5 shows the enormous fat pads on her trochanters, which are believed to be due to ovarian insufficiency, this being secondary to the hypopituitarism of the anterior lobe.

A patient who presented the typical aspects of primary hypogonadism was seen several years ago. Her menstrual periods occurred about four times a year and were accompanied by such severe pains as to totally incapacitate her.

Under the influence of ovarian medication, by mouth, she gained 10 pounds the first month and 25 pounds the first year, after coming under treatment. In four months her periods became regular and so nearly free from pain that she could continue at work during her menstrual period. This continued until she had an attack of influenza, when they again became irregular.

She discontinued treatment, and the intervals again lengthened and the periods became as painful as ever. Treatment was resumed, and they became regular and less painful. At one time she was given an ampule of ovarian residue, intravenously, which relieved the pain as promptly and as effectively as morphine. This woman died of pulmonary tuberculosis, which may have been the etiologic factor back of her

ovarian insufficiency, but which was not recognized by a number of men who examined her while she was under treatment.

It is commonly thought that relative amenorrhea occurring in the course of tuberculosis or other wasting diseases should not be treated. In my opinion, this is an error. If ovarian insufficiency occurs in the course of tuberculosis or other illness, it should receive adequate treatment. The correction of this disorder will, to say the least, not interfere with the handling of the primary condition.

Some time ago, Dr. Cheney advocated the use of an alkali in the treatment of a common cold. I believe that most men have found this effective, in some common colds, probably those occurring in heavy meat eaters who have experienced a shift toward the acid side of their acid-base equilibrium. The same heavy proteid diet (meat) may also cause a relative insufficiency of the parathyroids. This is entirely a matter of conjecture.

In closing, let me say that the so-called common cold is, many times, a very difficult condition to handle and merits a much closer study than it usually receives. In this study, the endocrines should be carefully investigated, paying attention to the four mentioned. If an endocrine deficiency is found, it should be corrected. Such correction almost always will be accompanied by a material improvement in the cold and in the patient's general health.

30 N. Michigan Ave.

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### MENTAL HYGIENE IN CHILDHOOD

*Mental hygiene is the science and art of promoting the successful adaptation of personal dynamic drives and goals to the more static social pressures and patterns. Childhood is in a state of flux, and temporal placement of its goal of maturity is somewhat uncertain. There is need for a clear understanding of the purpose of mental hygiene during childhood.*

*Mental hygiene is not a sacrosanct field, belonging to a single group of the medical profession, any more than physical hygiene is the sole right of a physical trainer. Medicine is shot through with potentials for mental hygiene. Every contact with a child, every contact with a home, abounds in opportunities for promoting psychic welfare. There are specific opportunities, however, for pediatricians and psychiatrists when types of behavior occur which indicate profound inadequacies of personal adaptation.—DR. IRA S. WILE, New York, in J.A.M.A., Dec. 14, 1929.*

# Colds\*

By G. J. WARNSHUIS, M.D., Milwaukee, Wis.

THE practice of taking things for granted, or assuming that our conception of a given situation or object is entirely correct, merely because it arouses in us no misgiving, no uneasiness, no feeling of inconsistency, is one of the greatest mental hazards we have to combat in medical practice.

A "cold" is, perhaps, the most commonplace malady in this part of the world and for that, and no other, reason we look upon it as trivial. Were it of less frequent occurrence—were this catarrhal and inflammatory disturbance of the upper respiratory tract a rare experience, something we hear about and seldom see as, for example, tularemia or Malta fever—no doubt something more would have been done before this than to "view with alarm" the disastrous disability and the sometimes fatal complications that are directly attributable to this cause.

In surveys made of department store employees, office workers and schools, it has been shown that colds produce a greater loss of time than any other one cause. If we could entirely eliminate the acute infections of the respiratory tract, there would have to be a radical readjustment in the general practice of medicine, especially if we include other organic lesions that have their pathogenesis in the foci of infection that frequently result from a so-called cold. In analyzing my records of work in small towns where my practice was a fair index of the incidence of disease in these communities, it is quite apparent that acute respiratory tract disease includes, by far, the greatest single group of cases, especially if we include those cases with a diagnosis of influenza in this group.

The great havoc caused by colds is more lamentable because it occurs, not for lack of means to prevent and cure them, but because the laity fail to take the subject seriously enough and medical practice and opinion is confused and represented, in a large degree, by the liberal prescription of coal-tar derivatives and cough syrups. While I should be the last to intimate that either of these do not have a valuable place

in the treatment of these conditions, I insist that they should be given according to certain definite indications, and not to the neglect of other measures which, in many instances, may be of greater importance.

## THE SYNDROME CALLED A COLD

To elucidate these considerations in the treatment of colds, it is necessary to differentiate the various conditions and degrees of inflammation and infection that are included in this class of ailments. A cold, to begin with, is not a disease but a syndrome—a term descriptive of a certain combination of symptoms that may occur under various conditions and with different causes. These symptoms consist of "chilly" sensations, malaise, a slight fever (not to exceed 100°F., in an adult), congestion and a watery discharge from the upper air passages, the congestion tending to extend into the mucous membranes of the throat as the condition progresses, and the discharge becoming purulent in character.

In certain infections of the upper respiratory tract, it is quite common to see no other symptoms than these; the infection runs a mild course; and the signs practically disappear after three or four days from the onset. Chilling of the body surface is so often a predisposing factor that it has come to be looked upon, by the lay mind, as the specific cause. The condition often occurs, however, in epidemic form, and it may also be associated with more grave infections of these mucous membranes, the accessory sinuses and the tonsils.

Instead of having a rather innocuous invasion of attenuated organisms habitually present in the nasal secretions of the host, the usual immunity to which has been temporarily impaired by exposure to cold or some other devitalizing cause, we may have exacerbation of an old ethmoid or antrum infection or an inoculation of these mucous membranes with a virulent pneumococcic or streptococcic infection, in either case exhibiting, at the onset, symptoms that might be confused with a simple coryza. The latter two types of inflammatory disease, not only might be confused with a simple coryza, but we can go much farther than that and

\*See the Voting Coupon on advertising page 48.

affirm that the development of grave infections and disabling complications is usually the consequence of making just that mistake.

#### STUDY OF INDIVIDUAL CASES

In determining whether or not we are confronted with an infection of a mild nature, it is necessary that we judge each case on its individual merits, rather than on some preconceived, arbitrary standards. Whether the condition will yield to a few simple measures, or will require active and watchful procedures, depends, first of all, upon the kind of individual with whom we are dealing. A robust, well-developed person, of normal weight and with a negative history as to frequent colds, sore throat, etc., is less likely, all other things being equal, to give us as much concern as does a thin, undersized patient, with a history of an attack of pneumonia, nasal catarrh and colds every winter. Between these two extremes we have all degrees and combinations. Where the history indicates the previous existence of foci of infection, proper search should be made for these, by direct examination, transillumination and, when feasible, the x-rays.

The nature of the onset may be sufficient, in itself, to indicate the type of infection responsible for the symptoms. Any infection, regardless of the tissues involved, that makes its presence known at the beginning with a severe chill, followed by a rapid rise in temperature, is not to be trifled with. There may not be an actual chill with high fever, but the other systemic symptoms may be more pronounced. Instead of merely a feeling of lassitude, there may be mental depression, fatigue on slight exertion, backache, aching joints, neuritic pains and a tender scalp. The local symptoms in the nose and throat may not be so pronounced as in the milder infections. Some of the most malignant forms of influenza have these characteristics, in their initial stages.

Never forget that, in estimating the seriousness of any infection, there are two components that determine the character of the symptoms: First, the nature of and the extent of the invasion; and, second, the phagocytic and inflammatory reaction of the host. When the latter is lacking, there may be a most destructive infection establishing itself insidiously and not making its presence evident until hopelessly entrenched. This lack of resistance and im-

paired bacteriolysis is recognized chiefly by the increase in the general symptoms over the local, a disproportion, as compared to the usual picture and a more rapid extension of the inflammation than the symptoms would indicate.

For instance, a case starts with what appears to be a slight cold in the head; not much irritation or discharge; a little feeling of "stiffness"; soreness in the nasopharynx; perhaps a moderate headache over one eye. Next day there is more purulent discharge from nose, the throat is still sore, and the patient is coughing. Auscultation of chest, at this stage, may show some roughened breathing and crepitant rales at the tip of the right scapula and dulness in this region, although febrile symptoms are absent. Instead of such well-defined pulmonary symptoms, the only other evidence of increased extension of the disease may be an earache or enlargement of the cervical glands. These cases, however, require well-directed treatment or they run a prolonged course, sometimes terminating in a pneumonia or, in other instances, leaving chronic foci of infection.

#### ILLUSTRATIVE CASE

The following case serves to illustrate how deceptive the onset of these infections may be:

A large, well-developed business man, 56 years of age and married, called me to his home on Friday, December 21, 1928, and said he felt as if he had "taken cold" the previous Sunday. The first symptom he then experienced was an attack of dizziness, and he has had a feeling of faintness, at times, each day since then. His back ached and the pain was much increased on assuming the erect position. This backache appeared to be the only symptom that could be attributed to a "cold," and probably was what led him to think that was the cause of his condition. He was tired and weak.

Examination disclosed a normal temperature, slow pulse, rales and roughened breathing in the parasternal region. There was nothing else to indicate any disease condition. While accustomed to indulging in alcoholics, there was no evidence of excess in this respect. My diagnosis was influenza, and the prompt and positive response to treatment vindicated the diagnosis.

The treatment in this case was the simplest possible, as I thought it would serve as an impressive demonstration of the efficacy of a stock vaccine in bringing about a reaction to a deep-seated infection. He was given 8 minims (0.5 cc.) of mixed influenza vaccine, containing about one billion organisms, and a tablet of amorphous, 2 grains (130 mgm.), combined with resorcin, to be taken every four hours. He was not put to bed, but was advised to keep indoors and to exert himself as little as possible. On



Sunday, two days later, the dizziness and back-ache were gone, he was in better spirits and was expectorating a mucous sputum, freely and without distress.

I do not use vaccines as a routine measure, as I think it is good policy to stick to conventional methods as much as the exigencies of our patients permit and, except where there is evidence of an extremely virulent infection or an unusually low resistance, there are other methods of stimulating immunity reactions that are quite reliable and meet with considerably more favor.

A simple coryza, in a healthy person without pronounced constitutional symptoms, localized rather definitely in the nares, without serious congestion and obstruction of the accessory sinuses and uncomplicated by tonsillitis, needs little treatment and needs to be guarded more against over-treatment. Local applications, if not harmful, at least do no good. Hot applications or infrared irradiation of the face, will relieve the catarrhal discharge and congestion to a large degree. Sinusitis, of course, calls for special treatment, which we need not go into here.

#### A SIMPLE TREATMENT

Where these symptoms do not abate in twenty-four hours or there is frequent recurrence, on account of faulty hygiene, somewhat more vigorous measures are needed. Experience has shown that the bactericidal activity of the blood is greatly increased by raising the internal heat of the body to a degree sufficient to produce free diaphoresis. The increased alkalinity of the blood resulting from such diaphoresis may, in itself, be a factor in raising the resistance to infection. Such diaphoresis is best obtained by a combination of four measures, applied as nearly simultaneously as possible. These are:

- 1.—A hot foot-bath, of not less than fifteen-minute duration.

- 2.—A hot lemonade, internally.

- 3.—A warm blanket, warm socks and the patient in a warm bed.

- 4.—Five (5) grains (325 mgm.) of acetyl salicylic acid or sodium salicylate.

If there is cough, an expectorant mixture may be prescribed, along with these measures, which are so well known and simple that it must almost appear silly to dwell upon them. If you wish to convince yourself, however, as to how indifferently they are ordinarily put into effect, ask anybody,

medical or layman, how he would go about it to break up a cold or what is the simplest and best way to produce a good sweat, and see how many answers you receive that are nearly alike. You will not hear two, unless your experience is different from mine. I have been instructing patients in this treatment for the past twelve years and I have yet to encounter one that would not stop me and say, "Oh yes; never mind; I know all about that; I know exactly what to do." They may have taken a foot-bath, more or less hot, for more or less time. Perhaps they took a hot drink. They all know about aspirin. But to apply a simple routine such as I have described, in a systematic way, seems to require just a little more effort and attention than human nature is capable of, unless you make it a point to speak seriously about it and apply some direct urging upon the patient, himself. I do not think any one of these measures is effective when used alone; but used in combination, they are very effective.

There are cases, of course, in debilitated individuals, complicated by tonsillitis or sinusitis, or cases of broncho-pneumonia or influenza, that need more elaborate treatment. If feverish or presenting other marked constitutional disturbances, the patient should be put to bed. Copious drinking of liquids, rest, and warmth to the extremities are very helpful. Calcidin, 3 grains (200 mgm.), in half-hourly doses of one grain each, repeated every four hours, is indicated for its alterative and, presumably, antiseptic action in the respiratory mucous membranes.

In conclusion, I wish again to emphasize the point that the management of these acute infections of the upper respiratory tract can be simplified by dividing such conditions into three classes: First, a mild catarrhal inflammation, with slight constitutional disturbance; second, the same or more distressing signs of local inflammation, attended by serious symptoms of systemic invasion; and third, acute inflammations, complicated by chronic foci of infection in the accessory sinuses and tonsils. All of these conditions are frequently referred to as "colds."

In determining the degree of systemic invasion, it is not sufficient to note the temperature and the character of the local inflammation. An estimate of the case must be made, based on an inquiry into the former experiences and behavior of the patient,

the functional vigor and state of nutrition, the character of the onset and course that the symptoms have shown, and the comparative severity of the local changes to the systemic effects.

The treatment of these conditions is simple and rests on time-tried, scientifically established principles. In spite of this fact, no attempt has been made to standardize such treatment, and there is scarcely any subject in the practice of medicine in which

more indefiniteness has been displayed. A great many factors are involved in this problem—factors determining resistance to infection, the bacterial flora of the nasal passages, transitional forms of the streptococcus and pneumococcus, the influence of the humidity and temperature of respired air, dust and other hygienic considerations—and much study is needed along these various lines.

123 Wisconsin Ave.

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## Cancer as a Public Health Problem<sup>\*†</sup>

By JOSEPH COLT BLOODGOOD, M.D., Baltimore, Md.

**I**N THE opinion of many statisticians and biologists, cancer should be included among the diseases in the problems of the public health departments, because deaths from cancer are rapidly approaching the first column. But there is nothing that the department of health can do towards the control of cancer, except to aid the American Society for the Control of Cancer and the medical and dental professions in getting the correct information to the people,

I am inclined to the opinion that, if we plan and put through a real educational program, beginning with a systematic course in the primary schools and continuing with the publications of the various health departments and with the aid of the press, the radio and the social nurse, we can aid the entire problem of public health by including cancer with other diseases and other problems.

Cancer, untreated, is a hopeless disease. The recorded experience, since the discovery of the microscope and the introduction of the autopsy, prove without the shadow of a doubt that all forms of cancer—carcinoma and sarcoma—left alone, ultimately kill the patient, and as a rule, within five years. Spontaneous cures, even assuming that they are possible, according to Czerny, occur, in the experience of a cancer clinician, once in fifty years.

Since we have had good records of

cancer cases, with microscopic diagnoses, we know that some undoubted cases, with and without operation, and recently, with and without radiation, may live for periods of from five to twenty-five years, but the percentage of these "latent" cases grows less with every year. The longest duration of life has been observed in cancer of the breast and recurrent fibrosarcoma of the soft parts.

We can, therefore, eliminate spontaneous cure and throw out of consideration latent cancer.

### SURGICAL CURES

Operative cures were well established by 1900, because, by then, we had good anesthesia, asepsis as well as antisepsis and well developed operative technic. Billroth's resection of the stomach; Halsted's complete operation for cancer of the breast; Kraske's removal of the lower end of the rectum, with all its surrounding fat, the coccyx and a piece of the sacrum; and Wertheim's radical dissection of the glands, in panhysterectomy for cancer of the cervix, were all conceived and perfectly executed by 1900, and these operations include, not only the local removal of the lesion, but also that of the neighboring lymphatic glands. All of these operations were based upon pathologic knowledge and were conceived and executed by surgeons of the highest technical skill. Not a single detail was overlooked by these pioneers.

The cures in the first decade of the operative treatment of cancer were first

<sup>\*</sup>Delivered before the American Public Health Association at its Cancer Symposium at the Chicago Annual Meeting, October 17, 1928.

<sup>†</sup>See the Voting Coupon on advertising page 48.

reduced by an inoperability of fifty percent and, second, by an involvement of glands or widespread metastases in at least eighty percent of the remainder. We may safely state that the chances of an operative cure were less than twenty percent, and, as inoperability was fifty percent, the actual cures were ten percent. This varied with different localities. In the lip, with gland involvement, the chances were fifty percent; in the stomach, ten percent, but with an inoperability of ninety percent, making the actual cures less than two percent. The failure to cure in the first decade was largely due (in the best clinics, entirely so) to the duration of the disease.

By 1900, a few surgeons who were also pathologists began to realize the deadliness of late intervention for cancer. A sufficient number of patients had come to a few clinics which kept good records, in the earliest stage of cancer, and the percentage of "five-year cures" was such a great contrast to the usual, that any clinic which really followed its cases, was absolutely sure that complete operation offered a very favorable prognosis. By 1910 those clinics which kept records and had a follow-up system—and there were but few—had so much evidence in favor of earlier intervention for cancer, in all localities, that it ultimately led to the formation of the American Society for the Control of Cancer, in this country, and to a similar movement throughout the world.

Briefly, we may state that, today, an enlightened individual, who has been properly taught in the primary school and kept informed, will never suffer from cancer of the skin or mouth and will probably be largely protected from cancer of the cervix. If the lump in the breast, which a woman submits at once to examination by a physician, is found to be cancer at the exploratory incision, the chances of a cure are seventy percent, as compared with ten if she delays until the highest glands in the axilla are involved. In every locality where sarcoma and carcinoma may occur, the percentage of cures is increasing, and these improved results are due to earlier treatment.

Let me briefly review what information should be given and how it should be broadcasted, and in what way the departments of health can help.

#### THE PROBLEM OF A LUMP

The child in the primary school knows what a lump is, although it may not know where the tonsils live. Children feel lumps as readily as do adults. Lumps that are not painful or tender may not be felt so quickly as those that are, but the danger of a lump is, not that it will not be felt by the child or adult, but that they will pay no attention to it, when there is a little pain or tenderness. If children are taught to report to their teachers or parents that they feel a lump and *why they should make that report*, they will retain this knowledge for their health when they grow up. We have broadcasted pretty well the danger of a lump in the breast, but there are other lumps in which delay is even more dangerous, and that is the lump that may be or is a sarcoma.

#### THE PROBLEM OF A PAIN IN A BONE OR JOINT

Through teaching regarding the essential foods, the disease rickets has disappeared, and the Department of Public Health has been very helpful in aiding the medical profession in bringing this before the public; but prenatal care has been the final successful drive in stamping in the minds of mothers that the future health of their children depends upon what they eat during the period of pregnancy and lactation, as well as on what they feed their children after weaning.

The public departments of health and the National Tuberculosis Association have so stamped out bovine tuberculosis with pasteurized milk and inspected foods that, today, tuberculosis of bone is becoming a rare disease. The inspection of the mouths of school children, the work of the department of health and the nursing, dental and medical professions, have so cleansed the mouths of children that pyogenic osteomyelitis, entering through infected tonsils, adenoids and teeth, is becoming as infrequent as tuberculosis of the bones and joints.

Up to 1905—the first fifteen years of my surgical experience—I was swamped with operations upon rachitic and osteomyelitic bones and tuberculous joints; now it is with sarcoma of bone, the benign, giant-cell tumor and the bone cyst.

Sarcoma of bone depends for its cure



upon an immediate x-ray examination after the first symptom. It is, perhaps, more common in children than in adults and affects chiefly the long pipe-bones of the upper and lower extremities. The chief symptom of onset is pain and tenderness, with or without swelling, limping or loss of function. We have taught children the danger of stepping on a rusty nail; although the wound is insignificant, they know that it is dangerous and that they need an antitoxin which the public health department will supply. It is no more difficult to teach them that, if they have a pain in a bone or joint they require an x-ray examination and not an antitoxin and, although as yet the public health department, except in a few places, does not offer it, there is no difficulty in getting it.

In my records at Johns Hopkins, the first five-year cure of a sarcoma of bone was recorded in 1918, five years after the amputation in 1913. Up to 1913, in the Johns Hopkins Hospital, there was not a single cure of sarcoma of bone after an amputation. In 1913 two limbs were amputated in the middle third of the thigh, one for a tumor in the lower end of the femur, and the other for a similar sarcoma in the upper end of the tibia. These two patients live today in comfort. There was nothing different about the amputation nor about the pathology of the sarcoma. The only difference was that the amputations were performed *before metastasis had taken place*. In 1918, these two cases represented four percent of the total number of sarcomas of bone treated by amputation up to that time. By 1923, only five years later, the percentage had increased to twenty-five. One needs no better evidence that correct information is a very important factor in the cure of cancer.

#### THE PROBLEM OF INDIGESTION

Among the group of accessible and operable cancers, cancer of the stomach is the most common. Yet, in 1915, I found seventy-five percent of inoperable cases among the cancers of the stomach recorded in the Surgical Pathological Laboratory of the Johns Hopkins Hospital, and only two five-year cures after resection, which is about ten percent of those resected and exactly 1.7 percent of the total

number of cases. The experience in the Mayo Clinic in the past year shows but slight improvement: Inoperability has decreased from about seventy-five to sixty percent.

We can teach children, when they have pain in the stomach of any kind, to go home and say to their mothers, "I have a pain in my stomach. Do not give me any food, cathartics or castor oil. Just put an ice cap on my stomach and send for the doctor." When these children grow up, there will be less difficulty for them to understand the message in regard to indigestion, which is: *If you have indigestion, go to a doctor and ask for an x-ray examination.*

People now, if they think they have heart disease, almost invariably say, "Doctor, please listen to my heart." The entire public health personnel of this country has been broadcasting to the people in every possible way: "If you feel ill in any way or have a cold, go home, go to bed and send for a doctor." The same advice must be given when they feel a lump, or have pain in a bone or joint or suffer from indigestion.

The department of public health in County, City and State, as well as the Federal department, must be in communication with the people all the time, and there were never better means of communication than today. The public press is open to them. They must learn to make their reports "news" and readable. A proper broadcasting voice and personality should be a requirement of at least one member of each public health department; and then they have their nurses who can carry this life-saving information to the people who do not read or listen over the radio.

Cancer, at the present moment, is an item of news. It is the great, mysterious disease, the cause and specific prevention and cure of which are unknown. Its only treatment is removal by operation or radiation. Vaccination against smallpox is an old story. There is nothing left for diphtheria, except to test the children and give them the preventive serum. Milk and water are old subjects; but cancer can be made the medium to carry the information in regard to the others. It must be linked with influenza and infantile paralysis, and all three should be presented

and probably associated with the importance of cod-liver oil in food and iodine in goiter regions.

#### PERIODIC EXAMINATIONS

The departments of public health have joined with the obstetric clinics in prenatal care, the basic principle of which is periodic examinations. Protection from cancer of the uterus depends upon this. It is not enough to tell women to report for examination the moment they observe anything unusual with their monthly periods or their reappearance after the menopause. The period of pregnancy is a splendid opportunity to teach mothers personal hygiene, preventive medicine and the importance of the earliest recognition of any trouble. Their maternal instincts are at the best and they want to do the best for the health of their expected children. It can be done efficiently and thoroughly, without exciting fear. Next to the period of the primary school life, this is the most important epoch in which women can be further instructed.

#### THE NIPPLE AND THE SKIN

Protection from cancer of the nipple and the skin, allows lessons in cleanliness and the first dressing of wounds, because the beginning of cancer of the skin or the nipple is not one bit different than a little wound of the skin. Both should be cleansed with soap and water, followed by alcohol, and protected with a little vaseline in some instances covered by a bit of gauze fastened with adhesive straps. We should teach the people to give up iodine. As a first treatment of a wound of the skin it is not harmful. It is a good antiseptic, but its repeated use is irritating. Soap and water and medicated alcohol are just as good.

The relation of an irritated nipple to an abscess, during the nursing of a child, has been recognized for years. Now that mothers are taught to keep the nipple clean, the occurrence of abscesses of the breast has been reduced from twenty to one percent, in my records. The same is true of an irritation of the nipple of a woman not nursing a child. In regard to cancer. Paget, who described cancer of the nipple seventy years ago, prophesied that, if women with irritated nipples would come to surgeons at once, simpler means would

accomplish a cure. Paget never had an opportunity to test treatment in this stage, because at that time the medical profession was teaching the public "secretly." Today, in my clinic, fully developed cancer of the nipple has almost disappeared. The majority of patients with irritated nipples come under observation so early that the condition is relieved by soap and water, followed by alcohol and vaseline. In a few the nipple must be removed and a frozen section made. If the section shows no cancer, the breast is saved. If there is the least suspicion of malignant disease, the breast is removed.

The same is becoming true of cancer of the skin. We rarely see late cancer of the skin today. This is largely due to cleanliness and education. We do see little lesions of the skin, like warts and moles, or little areas of irritation and ulcers, but these are excised under procaine and, no matter what the microscope shows, it is sufficient for a cure.

#### CANCER OF THE ORAL CAVITY

Dentists preceded the doctors of medicine in preventive medicine and, naturally, the campaign of education in regard to cancer of the mouth appears to have been put over first and is far ahead of everything else. The human being has been experimenting, ever since the introduction of tobacco, with the production of cancer in the mouth. Cancer of the mouth is due to ragged, dirty teeth, ill-fitting plates and the irritation by tobacco in any form. Children, properly informed during the primary school age about oral hygiene, will be more apt to take care of their teeth when they grow up, and they can understand the message in regard to tobacco. When one keeps the teeth smooth and clean and changes ill-fitting plates, the use of tobacco presents very little danger, and if, in addition, people are properly informed to discontinue tobacco in any form the moment they feel a sore spot or see a white patch, the danger of cancer of the mouth will be practically eliminated.

#### CONCLUSIONS

The message sufficient for protection against cancer is short and simple—most of it can be given in the primary schools. All of it can be incorporated, periodically, in the message of the public health departments, through the press, over the radio and by the nursing profession.

Cancer has assumed such great proportions as a cause of death that the majority of students are of the opinion that the laboratory of hygiene of the Department of Health of the United States Government should be encouraged by the people and aided by Congress in the research work it has undertaken in regard to cancer. Research should be carried on there on every disease threatening the lives of the citizens of this republic—influenza, infantile paralysis and cancer now seem to rank first in their demands.

In the Department of Agriculture of the

United States Government there has been and is extensive research going on regarding the cause, prevention and cure of diseases of animals, but as yet it has not occurred to Congress or to the people that it is just as important that the same kind of research should be undertaken in the Public Health Service of the Government. The number of research laboratories in this country and the amount of money invested are far too small to expect much. We must increase the budget and multiply the research workers.

904 No, Charles St.

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## Finding the Appendix in Appendectomies<sup>\*†</sup>

By WELLER VAN HOOK, A.B., M.D., Chicago

**I**N removing the inflamed vermiform appendix, the details, so necessary for the operator to know and understand fully, are not generally discussed with adequate freedom.

Although the diagnosis of acute appendicitis is relatively easy, the preoperative determination of intra-abdominal conditions is almost always unsatisfactory, with the result that mystery prevails as the incision is made, and surprises, often tragically important, are expected by all concerned.

Adequate self-preparation, by the surgeon, for this kind of surgical work necessitates, almost more than elsewhere, the fullest consideration of all available details that may be helpful in the course of the operation.

The so-called right-rectus incision in operating for acute appendicitis, is satisfactory enough, giving, with elongation in case of difficulty, enough room for work, but, in that case, sometimes causing weakening of the abdominal wall by the division of nerve branches. But the McBurney incision pleases us better, for obvious reasons; and it can give access to the pelvis also, if necessary, by extending it through the rectus sheath, tying the small epigastric vessels

and retracting the muscle belly. The operation completed, the rectus muscle slips into place and its sheath is sewed up, in continuity with the external oblique aponeurosis.

The abdomen opened, authors agree that, usually, the appendix is easily felt when the finger is introduced into the belly through even a small wound. An additional percentage of appendices are felt when the finger is swept around within the abdomen. But, if the little organ is still not found, the finger is carried upward in contact with the outer abdominal wall, since the cecum may lie in the abdomen, turned backward and upward, carrying the appendix with it.

These measures failing, the finger may be swept backward against and over the posterior peritoneum, toward the median line, following the brim of the pelvis, and then hooked upward to seek the peritoneal attachment of the cecum and the mesenterium.

If the appendix is not thus discovered, the method of last resort must be used—the colon and the cecum are to be made the direct object of search, and that with much confidence, for less than forty cases of congenital absence of the appendix are recorded. It is, with the rarest exceptions, *existent and attached to the cecum*. Furthermore it is almost equally certain to lie on

<sup>\*</sup>Read before the South Chicago Branch of the Chicago Medical Society.

<sup>†</sup>See the Voting Coupon on advertising page 48.

that part of the cecal surface at which the colonic bands, the taenia, meet. Whenever the cecum is once found, if the appendix does not immediately appear, the taenia are to be followed quite exactly to their meeting point. If the appendix is not then discovered at once, it almost certainly exists, possibly concealed by veils of adhesions or, perhaps, buried in one of the several normal or abnormal pockets so common in this region of congenital irregularities and of inflammatory adhesions. If not seen, the appendix may be sought for by gently rolling the tissues between the thumb and finger, to feel if it is buried somewhere under the peritoneum. A probe or grooved director may be used—cautiously, to avoid bowel perforation—for separating tissue folds.

The most serious of our troubles is encountered when the cecum itself is not promptly encountered. To be prepared for this difficulty, every operator should be fully familiar with the gross embryology, the development and, especially, with the rotation of the lower digestive tract, including the cecum, the colon and the small intestine. (See books on embryology and anatomy). A great variety of congenital anomalies exist, which are rather readily recognized and understood, with some study.

Braeunig (*Deut. Zeitschr. f. Chir.*, Vol. 176) gives us a valuable account of a number of cases of congenital abnormalities of the intestine, as bringing about intestinal obstruction. He details also cases of acute appendicitis in patients in whom, as he describes them, the ascending colon is wanting. In such cases, American surgeons speak of failure of descent of the right side of the colon, minimising the thought of lack of development of cecal tissue, though that lack is recognized. Such cases, he says, are not exactly rare in the city hospital of Worms, occurring two or three times a year.

With Dr. Andrew V. Dahlberg, I saw such a case, in a six-year old girl, at South Shore Hospital. Her appendix symptoms suggested only the usually-found relations. There were the commonly-found tenderness at McBurney's point and the usual rigidity there. Yet, when the abdomen was opened, the appendix was not felt; but a segment of the colon encountered, upon palpation with the fore-finger, and drawn out of the wound, was found to be a part of the

transverse colon. This was replaced in the abdomen and the wound edges retracted upward. But this proved inadequate and an enlargement had to be made in the direction of the liver. With strong retraction, the cecum was, with difficulty, discovered, so closely contacting the posterior peritoneal wall that only with much effort the appendix was removed. The patient made a tedious recovery.

The commonest difficulty in this category occurs by lifting into the wound a wrongly-chosen loop of colon which, when gently pulled out, *does not bring with it the cecum*. Such a loop may belong to the ascending colon, the hepatic bend of the large bowel, the transverse colon or even a part of the descending colon, as, for example, the sigmoid flexure. Such difficulties are commonest in women, who are often affected with a greater or a minor degree of splachnoptosis.

When such a loop, not bearing the cecum, is brought to the wound, it must be returned and another portion of the colon sought, the wound sometimes needing corresponding enlargement. Under extreme stress, the presenting loops of bowel, if they cannot be pushed away with packs, may be, for a few moments, drawn out of the abdomen. Sometimes much bowel may be necessarily drawn out before the cecum or ascending colon is found—an unfortunate requirement, because of the danger of traumatism, infection and paresis.

When the major congenital deformities and abnormalities of the region are encountered, nothing suffices, as a rule, except an enlarged or, often better, an additional incision.

Most frequently, especially in young children, these very trying cases are due to the prenatal failure of the large bowel to rotate fully to the right, or to undergo descent. Here, usually, the cecum is discovered as the examining hand passes upward toward the liver, where it most commonly lies somewhere between the gall-bladder and the crest of the ilium; but, exceptionally, it may be quite near the liver.

Should the usual incision at McBurney's point be unwisely extended too far upward, it is likely to sever some of the intercostal nerves that run from the spine to the rectus and other abdominal muscles, causing such a paralysis as results in the formation of an extensive hernia-like relaxation or pocket

that will, later, require for its relief a plastic overlapping of fascia (of the external oblique aponeurosis or a detached fascial graft). So, unless strong retraction suffices for adequate exposure, a separate, muscle-splitting incision is best.

If once the colon is discovered in an unusual position or situation, the cecal taenia must be followed, as before, to the appendix itself. And this rule is valid, even if the case turns out to be one of left-sided ascending colon or even of *situs inversus viscerum*.

The very great help obtained by roentgenography must, as a rule, be set aside in acute appendicitis cases, because of lack of time or the development of paralysis, paresis, or distension, or on account of the undesirability of filling the bowel with the inert, heavy barium.

On the contrary, repeated preoperative enemas are often worth the time and trouble involved, because the removal of gas and

fluids renders the whole procedure easier and more exact, while diminishing the tendency to distress from irregular peristalsis.

An unusual occurrence took place in a case operated upon for Dr. P. E. Holleman. In an undeveloped child of four years, a distinctly marked appendicitis occurred. At operation the appendix was sought through a McBurney incision, perhaps a trifle too far to the right. One came to the peritoneum as a recognizable sac that could be easily pushed over a little toward the median line, and, as one studied the tiny, almost infantile abdomen, with nearly vertical ilia, the bladder was found, by chance, somewhat strongly filled with urine, in continuity with the peritoneum and almost in contact with the lateral abdominal wall, lifted well out of the pelvis. Needless to say the peritoneum was opened higher up, and the appendix, found there, was easily removed.

31 N. State St.

## The Effect of Free Iodine Administered Intravenously\*

(Some Laboratory Studies)

By G. ELLINGTON JORGENSEN, M.D., Hollywood, Calif.

**A** MARKED impetus in intravenous medication, during the past several years, has resulted in a gradually increasing number of remedial agents being thus exhibited in the treatment of disease.

Among the many elements and compounds administered by the intravenous method is iodine. For a number of years sodium iodide, dissolved in sterile, double-distilled water, has been administered for the iodine effect. Other preparations have been similarly exhibited but, with the exception of colloidal iodine, there seems to be little data on the effect of free iodine, administered directly into the blood stream. Nor has the present investigator found any extensive data on the effect upon various important organs when iodine, in therapeutic doses, has been exhibited over varying periods of time.

For the purpose of personally observing

the effects of free iodine, both immediate and remote, when administered intravenously in therapeutic doses, over periods of weeks, the studies herein tabulated were carried out.

It was realized from the start that, in order to acquire data on the effect of free iodine, a preparation must be used which did not contain other chemical agents, especially sodium, potassium, glycerin, alcohol or any of the complex organic molecules to which iodine may be attached to form the so-called "organic iodine."

For that reason tincture of iodine, Lugol's solution, the iodine salts and organic iodines were disqualified from the start. To overcome this apparent lack of a preparation containing free iodine, an effort was made to prepare a solution in the laboratory. But numerous difficulties arose, among which was the uncertainty of actual iodine content in such a crude preparation. At this time attention was drawn to a preparation ethic-

\*See the Voting Coupon on advertising page 48.



ally offered the medical profession and known as Soluble Iodine.\*

This preparation contains 5 percent of free iodine, in a menstrum of 42 percent ethyl alcohol in distilled water. Here again, however, the objection of the presence of an alien compound was encountered. Alcohol was present in this preparation. But the fact that none of the alkaline salts or glycerine were present caused the writer to use this preparation of free iodine, after the ethyl alcohol had been removed.

In passing it may be of interest to note that this preparation is recommended for intravenous and intramuscular use in dilutions of 1:10, and trials with laboratory animals revealed that such dilutions may safely be administered intravenously. But since these studies were motivated by a desire to observe the effect of free iodine when administered intravenously, and to study any possible retrograde effects it might promote in vital organs when exhibited over a period of time, it was decided that, even though it would be safe to administer the preparation intravenously, with the ethyl alcohol content present, such a practice would remove the investigation from the realm of a free iodine study. To overcome this, the alcohol was removed and its bulk made up with double-distilled water.

To check the difference, if any, between the effect of free iodine, administered intravenously, and a similar preparation administered by mouth, a series of studies to illuminate that question was run concomitantly with the intravenous work.

Rabbits were used for the intravenous studies and adult white mice were used to study the effect of free iodine administered by mouth.

An arbitrary dose of twenty milligrams of iodine solution (containing 5 percent of free iodine) per kilogram of body weight was chosen for the intravenous studies, two doses being given weekly; and thirty milligrams of the same solution per kilogram of body weight was chosen for the by-mouth studies, this quantity being administered three times weekly†.

\*Soluble Iodine, as used in these studies, was prepared by the Burnham Soluble Iodine Co., Auburn, Mass.

†The actual dose of free iodine administered intravenously was 1 milligram per kilogram of body weight; and the actual quantity of free iodine administered by mouth was 1.5 milligrams per kilogram of body weight, computed on the estimate that the iodine solution used contained 5 percent free iodine.

The intravenous doses were diluted 1:10 with double-distilled water and administered into the ear veins by use of a fine hypodermic needle.

The studies of the effect of free iodine, when administered by mouth in definite dosage, were fraught with some difficulties at first. It was a question as to how to administer the iodine to white mice. But by placing each mouse in an individual cage it was possible to determine the approximate quantity of water each would consume and that quantity, containing the daily dose of free iodine was placed in the cage on the three days each week that the element was exhibited.

Beginning with the last day of the first week and repeating every week thereafter for fifteen weeks, a rabbit and a mouse were killed and autopsied. Gross lesions were sought for, after which specimens of the spleen, liver, kidneys and thyroid were prepared for microscopic study by fixation, sectioning, and staining. Also the appearance and general behavior of each animal were observed and recorded daily.

The following chart contains the observations made during the fifteen weeks the studies were in process. In addition to the examinations charted, studies were made of the bladder, of the testes (of the males) and the mammary glands (of the females). No gross lesions were found in any of these organs. The saliva and urine of all rabbits were positive for iodine, postmortem.

The number given each rabbit in the chart, not only identifies the animal, but also indicates the number of weeks it had been subjected to intravenous injection of free iodine in water.

It will be noted that rabbit No. 3 revealed a slight fatty infiltration of the liver. There was, however, no biliary or hemorrhagic congestion nor were there observed any other forms of retrograde cell changes. The rest of the organs being normal, coupled with no visible changes in the animal's health prior to death, it is assumed that the iodine had caused no harm.

The infarct in the right kidney of rabbit No. 5 was an ancient affair and in no way could be blamed to the iodine treatment.

Rabbit No. 6 suffered from **tularemia**. It became ill two days after the first intravenous exhibition of iodine and its indisposition was, at first, attributed to the drug. But later study of the animal revealed a

CHART SHOWING CLINICAL AND HISTOLOGIC FINDINGS ON FIFTEEN RABBITS SUBJECTED TO INTRAVENOUS DOSES OF FREE IODINE TWICE A WEEK DURING A PERIOD OF FROM ONE TO FIFTEEN WEEKS.

RABBIT	LIVER	KIDNEYS	SPLEEN	THYROID	ANTE-MORTEM BEHAVIOR AND APPEARANCE
1.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
2.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
3.....	Slight fatty infiltration .....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
4.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
5.....	No lesions.....	An area of infarction, right kidney .....	No lesions.....	No lesions.....	Normal. Lost no weight
6.....	Numerous old abscesses .....	Glomerular nephritis .....	Six splenic abscesses .....	No lesions.....	Lost weight; then gained
7.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
8.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
9.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
10.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
11.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
12.....	No lesions.....	No lesions.....	Slight congestion .....	No lesions.....	Normal. Lost no weight
13.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost no weight
14.....	No lesions.....	No lesions.....	No lesions.....	No lesions.....	Normal. Lost 6 grams weight.
15.....	No lesions.....	Slight congestion .....	No lesions.....	No lesions.....	Normal. Lost 9 grams weight.

NOTE.—In each of these rabbits, iodine in aqueous solution was administered twice each week, via the ear veins, for the number of weeks indicated by the rabbit's number. In each case the animal was killed six hours after the administration of iodine.

septic febrile process, indicating a low-grade infection. The true identity of this infection was discovered at autopsy, when cultures and smears were made from the punctiform abscesses in the liver. However, it is interesting to note that the blood was sterile, as were also eleven out of fourteen liver abscesses cultured. One positive culture was obtained from the spleen, but five splenic abscesses were sterile, as were also all cultures made from the kidneys, peritoneal, pleural and pericardial fluid. A solidified area in the lungs was positive for staphylococci but negative for the organism of tularemia. A small abscess in the apex of the right lung was positive, giving a pure culture of *Bacterium tularense*.

Rabbits Nos. 14 and 15 were beginning to show symptoms of iodism.

At the time of autopsy, qualitative iodine tests were made of urine obtained from

the bladder. In none of the rabbits were there any lesions observed in the bladder, but the urinary tests invariably were positive for iodine.

#### CONCLUSIONS:

A 5-percent, aqueous solution of free iodine, in doses approximating 20 milligrams of the original solution per kilogram of body weight, may safely be administered intravenously, when diluted 1:10 with sterile, double-distilled water.

It also seems conclusive that such exhibitions of iodine, twice weekly over a period of from one to fifteen weeks, do not cause retrograde changes in the liver, kidneys, spleen or thyroid gland, though a thorough iodine saturation obtains, as evidenced by the positive urinary findings and the beginning symptoms of iodism after fourteen or more weeks have elapsed.

Accidentally, a rabbit afflicted with tularemia was included among the group studied, and the fact that this animal passed through a syndrome of febrile indisposition, with clinical improvement in evidence at the time it was killed, is, when coupled with the abatement of destructive organic processes, as revealed by histopathologic studies, quite significant and suggests further study for the purpose of determining what influence, if any, iodine may have in the control of infections of human beings with *Bacterium tularense*.

#### OBSERVATIONS OF MICE GIVEN FREE IODINE BY MOUTH

Fifteen white mice were subjected to oral doses of free iodine three times weekly. These doses each approximated 30 milligrams of the iodine solution (1.5 milligram free iodine) per kilogram of body weight. One mouse was killed each week and studied postmortem in a manner identical to that adopted for the rabbits; also daily clinical observations were made and recorded.

The findings tabulated for these mice were so identical with those observed in the rabbits that it was thought unnecessary to chart them. In none of the mice were

there any lesions indicating iodine poisoning, although a few of the mice, in the later weeks, did show symptoms of iodism, clinically. In all of the mice, urinary studies made of specimens removed from the bladder at autopsy were positive for iodine, indicating an adequate therapeutic iodine saturation.

#### FINAL CONCLUSIONS:

Iodine may safely be administered, intravenously or by mouth, in doses adequate for therapeutic purposes, over long periods of time, without danger of organic injury. It therefore seems logical to believe that iodine is toxic only in doses far in excess of those necessary to maintain a therapeutic effect.

There also seem to be data to indicate that iodine, in a free form in an aqueous solution, may be administered by mouth without untoward gastric effects, and that only in those cases where a rapid iodine effect is indicated is it necessary to administer the element intravenously; but when such an immediate effect is required it is safe to administer the drug intravenously, in therapeutic doses, when highly diluted with sterile, double-distilled water.

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#### SYPHILIS AND THE PRACTITIONER

I think I can sum up most satisfactorily what I have endeavored to stress particularly by pointing out that the physician in general practice has, in dealing with the venereal diseases, a responsibility to the public such as he bears in no other instance in his relation to preventing the spread of disease. On account of the very nature of the mode of spread of syphilis and the resulting secrecy with which its occurrence is surrounded, the family physician alone usually is aware of the identity of the case and in possession of the opportunity, not only to treat and advise the patient, but to secure information and endeavor to apply measures that will lead to the discovery and elimination of other sources of infection. He it is, also, who frequently has the first opportunity to find the hidden case of syphilis and to bring it under treatment. If he fails to assume and discharge this responsibility properly, it may be because he has not had the opportunity to see the problem from the point of view of prevention. If he has not, it is the duty of the health officer, the medical society and the medical school to see that he does.—  
DR. THOMAS PARRAN, Washington, D. C., in J.A.M.A., Dec. 7, 1929.



# A Space-Saving Wall Unit\*

By J. F. MONTAGUE, M. D., *New York City*

IN furnishing a treatment room or a special diagnostic room, certain articles of furniture are absolutely indispensable. Indeed, the modern practice of medicine, in the departments of treatment and diagnosis, has so many requirements as to utensils that, unless one has an extremely large house or suite of offices, he finds himself sorely pressed for space. This situation is still more keenly felt when a certain limited space is at one's disposal as, for instance, in a special department in a hospital or when the cubicle system, which is now in vogue among city practitioners, is employed. Even when one has considerable or ample space, it is, none the less, desirable to keep the various articles of furniture in the examining and treatment rooms down to a minimum and in other ways to simplify the paraphernalia. For instance, besides an examining or treatment table, one requires an instrument tray, a medicine stand, a refuse basin, a light and a screen. In many instances, it is desirable to have a separate refuse tray for soiled instruments. All these articles requiring, as they do, stands and rollers, are bulky, frequently get in one's way and make cleaning of the floor surface a far-from-simple procedure.

It is the object of the device, described herewith, to incorporate in one unit all the necessary equipment mentioned, and to place it in such a way as to be readily accessible to the doctor, and yet capable of being easily brushed aside when not in actual use. Moreover, the arrangement favors easy cleaning of the floor surface. Many other advantages have been discovered during the course of an experience with it, extending over six months.

As shown in Figure 2, a  $\frac{1}{2}$  inch metal rod is attached vertically, parallel with the wall, by two screw plates, fastened two feet and six feet, respectively, from the floor level. On the rod there are strung six, eight or more lugs of solid cast iron, which are simply drilled with two holes ( $\frac{1}{2}$  inch in diameter), one to accommodate the rod and the other to hold a tray frame. I have

constructed the unit described below, merely as an installation which has suited my particular convenience; but it should be borne in mind that it is extremely flexible and that any arrangement is possible, depending upon the needs and desires of the particular physician using it.

The manner in which this wall unit functions may be briefly described as follows: When not in use, the screen is swung toward the

wall, along with all the trays, as in Fig. 1. Thus, all instruments, medicines and articles of refuse are completely out of sight, nothing being visible but a clean, white sheet; the entire unit does not project more than six inches from the wall. While we have in mind the screen and trays in this position, attention is called to the fact that cleaning of the floor surface under this area is easily accomplished, without in any way disturbing either the screen, the trays or their contents.

To put the unit into action, the screen is thrown back and the various trays are brought forth to whatever angle is convenient, as in Fig. 2. I personally, use the arrangement shown in the diagram; that is, I have my instrument tray at the top; my medication and applicator tray next; third, an extension light; fourth, a soiled instrument tray; and, fifth a soiled applicator



Fig. 1.—Wall unit when not in use.  
Fig. 2.—Wall unit ready for use.

\*See the Voting Coupon on advertising page 48.

and dressing tray. Should my wants increase, I have but to add another lug and another tray frame and all is in readiness.

The above-described contrivance is not for sale, is not manufactured by any firm and, indeed, is so simple in arrangement

that it can easily be constructed by any mechanic, gas-fitter or amateur inventor, such as I am, myself. I will gladly furnish, to anyone interested, without obligation, a blue print of this device.

30 East 40th St.

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## Radiation in Gynecology\*

By H. BEUST, M.D., Villiers-Sur-Marne, France

**G**YNECOLOGY offers to practitioners a great number of chronic affections which are the aftermath of antecedent acute infections. These chronic infections attack the mucous membranes where numerous glandular formations meet, and cause changes in the thickness of the tissue infected, where infection remains and organizes in such way as to be of indefinite duration.

The commonest infecting organism is the gonococcus, but in chronic cases it is not always possible to find a fixed and determined microbe. Clinically, the resulting discharges constitute the chronic inflammatory exudation of these infections. They can be of different histologic characters, from mucous to purulent discharges, their color and aspect differentiating them. They meet in the different branches of the genital tree—the vulva, vagina and uterus.

From the therapeutic point of view, these deeply-rooted, chronic infections constitute, for the practitioner, affections that take a long time and are hard to cure by ordinary therapeutic methods.

### EXPERIMENTS WITH RADIUM

Credit is due to Dr. Lacapere for having foreseen the good which could be derived from the use of radium rays and having precisely determined the mode of their application. The first experiments attempted for the treatment of endocervicitis were with an apparatus of small diameter containing compact salts; then an apparatus in the form of a nail (Wickham model). They were left in contact with the mucous membrane two to four days, with the interposition of a rubber cover-

ing. The results were satisfactory, but the fragility and high price of the apparatus made the application impractical.

What is more, the filtered rays, acting in this manner, exceeded the limits of the mucous membrane, causing pain and contractions of the uterine muscles, so another form of application was necessary. Dr. Lacapere, then, thought it best to employ the total rays; first, because these chronic affections are localized in the mucous membrane and are superficial; second, because the alpha rays could not reach the uterine muscles and would affect only the superficial tissues; third, because the use of non-filtered rays permitted the employment of less radioactive substances and avoided the construction of complicated apparatus, thus rendering these applications accessible in current therapeutics.

The research on different excipients permitted us to decide upon the form of fusible crayons or bougies, with a melting point at the temperature of the body. The results from the systematic use of very small doses of a radioactive product were absolutely conclusive, and the reactional phenomena of the uterine muscles were avoided.

### TOPICAL APPLICATIONS

The action of the radiferous topical application is produced from the very first hour of its use. Dr. Lacapere made a research on the microscopic character of the exudation period. First, he observed an intense increase in the number of polynuclear leukocytes in the pus; then an augmentation in the number of mononuclears; and finally, the existence of a uterine exudation, consisting of thick mucus, formed of numerous filaments and con-

\*See the Voting Coupon on advertising page 48.

taining a quantity of microorganisms of all forms.

The application effected a veritable chemotactic stimulation of the leukocytes, ending in the resolution of the glandular congestion of the mucous membranes and the complete elimination of all elements which chronically and superficially infected this tissue. In this way a **uterine curettage** was effected—medical curettage—which did not leave, in the aftermath, a wounded uterus, necessitating a period of rest; and which did not end (as in the use of caustics) in the production of atresia, which may hinder the procreative functions of the uterus.

But even if the endocervicitis were ameliorated and even cured by this means, the vaginitis which accompanied it persisted, for the use of the crayon only was insufficient. The dilution of the radioactive product in the secretions is to be considered. In all vaginal affections, or those of the vaginal portions of the cervix, the most logical mode of application consists in the use of ovules or vaginal suppositories. The radioactive ovule gave us equally conclusive results, due to an analogous mechanism to that shown for the endocervicitis. The application of ovules relieves ulcerative endocervicitis in from one to three applications, according to the gravity of the affection.

In affections which attack the vulvar mucous membrane or Bartholin's glands, the application of a pomade or ointment gives better results. All of these radioactive products act equally, by the same mechanism resorted to in the work of Drs. Lacapere and Galliot on the therapeutics of these affections by the total rays of radium.

In all of our experiments we used the same product, prepared in three different forms; crayons, ovules and pomade. This radioactive substance is called Nitium,\* and contains 6 micrograms of bromide of radium per crayon or ovule. With this we could personally observe, in gynecology, conclusive results in different affections, some of which were old ones.

Besides these successful and rapid effects, as noted in our observations, this medication has the great advantage of absolute harmlessness. In truth, the doses

employed are very weak, but nevertheless capable of producing appreciable effects, either in the form of crayons, ovules or pomade, and this product revealed itself as a truly active local medication and a powerful therapeutic auxiliary.

#### TECHNIC OF APPLICATION

The technic of radiferous topical applications is very simple. Ovules may be applied, one every four or five days. Ascertain the results after the third or fourth application, and prescribe a continuation, more or less, according to results.

The placing of a crayon in the cervix or uterine cavity must be done by the physician, one every four or five, or even eight, days. This is simple and easy. A speculum and two forceps, such as are used for gynecologic treatment, suffice. After a vaginal douche, insert the speculum and dry the surface. After having rid the cervix of mucus and evacuated all water remaining from the douche, swab with iodized alcohol. Take a crayon with one forceps and introduce it into the cervix; with the other forceps introduce a tampon bound with string, to hold the radioactive crayon in place. Advise the patient to remain in bed for 24 hours. The following day the patient needs but to remove the tampon and take a vaginal douche.

It is necessary, especially in old cases, to make three applications, at intervals of four to five days; then, after a time, make a fourth or fifth application, only if it seems necessary. In mild or medium cases, the first three applications are generally sufficient. Upon nearing the menstrual period, avoid the application of a crayon.

Sometimes, in the course of these applications, pain may occur, which may be very slight or may create a general sensitiveness of the abdomen, but not accompanied with peritonism. These phenomena occur because, besides the endocervicitis, there is an adnexitis, which is influenced by the local excitation brought on by the radiferous topical application and the consequent leukocytosis. They are not serious and quickly pass away. It is, however, better to warn the patient of the possibility and to make her keep to her bed.

Alkaline injections—perborate of soda or bicarbonate of soda—are recommended, in the intervals of topical applications.

\*The Nitium products contain radium bromide, uranium, fluoresceine and gomenol, with suitable excipients.

Finally, we must never forget that, in old affections, a certain degree of vaginitis is a natural consequence of the uterine infection and justifies the application of ovules, which can be used without inconvenience as soon as the intrauterine condition is relieved.

#### HEMOSTATIC ACTION OF THE RAYS

Whether the purulent endocervicitis is the consequence of provoked abortion or not, there is another affection which is more rare but which is generally caused by an antecedent miscarriage: This is hemorrhagic metritis. This variety of metritis defines itself. In it, the hemorrhages are characteristic and dominate the whole clinical tableau.

In the hemorrhagic metrites, two types are seen: One, the menorrhagic, is characterized by a prolongation of menstruation beyond the normal limits, causing the periods to seem extremely irregular; the other, the metrorrhagic type, consists of red discharges, of variable abundance, which leave the woman bleeding continually.

Abortion is the most frequent cause of hemorrhagic metritis, but it is not the only cause of this affection, as the condition is observed in cases (even in virgins) where the alteration of the mucous membrane is of the polypoid type. Other hemorrhagic metrites are found at the menopause. At this age it is possible to confuse these metrites with fibromatous uterine disease, when the organ itself is big or the neoplasm of the body of the uterus is small.

The cases of hemorrhage during the menopause often arise from a special weakness of the vessels of the uterus, due to more or less intense arteriosclerosis, as can be observed upon examination of the organ, after a radical surgical intervention.

If the chronic, purulent metrites are annoying because of their tenacity, they only exceptionally cause danger to life. On the contrary, the hemorrhagic metrites, by the abundance and repetition of the bleeding, are of a nature to gravely and unfavorably influence the life of the patient. They always constitute a serious affection, going so far as to necessitate surgical operations of gravity and importance. In young subjects, radical interventions have the great inconvenience of depriving the organism of the internal ovarian secretion, and ultimately necessitate oophorectomy.

That is why, in all cases, before resorting to such extreme measures, we always attempt to stop these hemorrhages by means of a surgical curettage. Perhaps this curettage has the advantage of acting rapidly, but it makes a period of rest necessary and places a burden upon the patient's general resistance. Moreover, it can create an open door to a serious infection, in an organism already debilitated.

We were able many times to notice the exact action of the salts of radium on metrorrhagia which occurred in prolonged cancer cases with gland metastasis. In absolutely hopeless cases, application of Dominici's tubes of filtered rays effected a discontinuance of these hemorrhages. This was transitory, however, since the fatal evolution of these malignant tumors could not be stopped.

It was a legitimate and logical thought that the hemostatic action of the radioactive agents would be distinctly felt in cases of hemorrhagic metritis. Cesbron was one of the first, if not the first, who tried to use this therapeutic method. He thought of the use of compact salts of radium, in suitable apparatus, employing the total rays. The results obtained were most encouraging, but the necessary apparatus was too costly to be generally practicable and was easily altered by the humoral medium in which it rested. What is more, *we always ran the risk of losing the applicators.*

The results obtained by Cesbron, gave the idea that, if another form of radioactive agent could be offered, easier to handle in current practice, it would be worth while to try it and compare the results. This practical method, which is a very simple technical application, is absolutely innocuous and can be obtained at relatively small cost, consists of radioactive crayons. Dr. Lacapere even foresaw that the fusible crayon was a mode of presentation whose application to the uterine mucosa was as immediate and as perfect as possible. These crayons, after the first application, ordinarily stop the hemorrhages and, after several applications, prevent their return. The fusible crayons, therefore, give absolutely comparable results to those obtained with fragile and more complicated apparatus.

The radiferous topical applications effect the same results as those of surgical curettage of the uterus, and have this advantage over the latter, that there is no need of a period of rest for the reparation of

the wounded mucosa of the uterus—they do not constitute a surgical operation, small as it may be, which can be accompanied by shock, and do not create an open door to infection.

In cases of hemorrhagic endocervitis—the type observed in the menopause, for example—this medication presents a great advantage, the surgical operation being serious, because the surgeon often has recourse to total hysterectomy. The reasonable and systematic application of this medication deserves being retained as a powerful therapeutic means to try regularly, with a great chance of success, in all cases of parenchymatous or post-abortion hemorrhagic metritis.

All those who have practiced the application of the total rays of radium, in hemorrhagic metritis, are unanimous in recognizing that these affections constitute a formal indication for this medication, in the majority of cases, to replace the surgical interventions usually practiced to this day.

In the hemorrhagic metrites, whatever their cause, the mechanical action of the radioactive topical applications is similar to those indicated in purulent metrites with glairy mucus and pus. The next morning after an application, we observed an abundant exudation, semipasty and of chalky color, and stained with blood only for the first or the first two days, after which it takes on all the characters of the exudation observed following such applications in purulent metritis, and ceases after 3 or 4 days.

In the hemorrhagic metrites we also observe the characteristic leukocytosis, followed and accompanied by the phenomena already described. The action especially interesting here is that the hemorrhage, often an alarming symptom, disappears very rapidly. The applications must, however, be repeated to obtain a durable and conclusive result.

The application of the crayons can be made, following the technic indicated, every four or five days or every eight days. Three crayons must always constitute the base of a cure by this medication, but this base is often insufficient and it is necessary to go as far as five, six or seven applications of the crayons, with a time interval of seven days between each application.

On observations we have made of hemorrhagic metritis, the results are very interesting. It has shown us that, in post-abortion cases, instrumental curettage has

been avoided, and this without any detriment to the health of the patient or the normal functions of the organs. In cases of parenchymatous, hemorrhagic metritis, we verified the fact that the serious state in which we found our patients could have led to interventions which might have been very serious. By a prolonged and regular application of radioactive crayons we affected, without operative shock, a cure which, until now, has shown itself as substantial as if a radical surgical intervention had been practiced. We add that the patient has the advantage of having conserved, in full force, the life of the internal ovarian secretion. However, the future alone will decide.

*It is commendable that this means has never produced a case of sterility, such as we would have infallibly seen had we practiced a radical intervention.*

#### CONCLUSIONS

1.—The total rays of radium constitute a special medication which it is necessary to distinguish from the curietherapy of cancers by means of filtered rays. The first has an exciting action; the second an inhibitive action, destroying the cellular elements.

2.—The action of these rays is, because of its weak penetrating power, local and strictly superficial, and is characterized by:

- (A) An intense chemotactic leukocyte stimulation.
- (B) A rapid proliferation of the reproductive cells.
- (C) An abundant secretion from the glands.

3.—These rays, therefore, have a therapeutic importance that cannot be denied. But we must keep to the action of the total rays and reinforce these by the addition of salts of the radioactive substances emitting only the alpha rays.

4.—One must not lose sight of the fact that it is impossible to be rid of penetrating rays, except by employing smaller doses than those susceptible of producing reactional phenomena, following the indications we have advised.

5.—The well-applied use of total rays reveals an absolute innocuity, when we use this medication with doses of radioactive substance as weak as possible.

6.—The strict local action of total rays calls for the use of the preparations we have adopted, in any form we desire to use. In



gynecology, the three forms are: crayons, ovules and pomade.

7.—The total rays are a powerful hemostatic agent, which is indicated, for trial, in all cases of hemorrhagic metritis.

8.—In gynecology, the results of this medication, applied to the uterine mucosa, are comparable to those obtained by surgical operation. It even seems, in certain cases where instrumental curettage was unsuccessful, that the action of the total rays showed itself extremely active. It is just, therefore, to agree to the possibility of medical curettage by this medication.

9.—The action of the rays proved as intense as that of caustics, and has the great advantage over them of not creating atresia,

the cause of future dystocia. It seems to realize an excellent cure of all sterility cases due to metritis.

10.—The gynecologic indications to remember are as follows:

Hemorrhagic endocervicitis  
Purulent chronic endocervicitis  
Ulcerous endocervicitis  
Vaginitis  
Bartholinitis  
Suspected vulvar ulcerations

11.—This medication constitutes, therefore, a method of the future, destined to be used with a maximum chance of efficacy in gynecology.

19.—Avenue des Sorbiers.

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## Developing the Medical Business\*

By J. LEWIS WEBB, M.D., *Chicago.*

**M**EN have discovered that they can attain greater success when working in groups than they can alone. Each citizen in the most enlightened countries realizes that a case of a contagious disease, anywhere in his community, has a serious interest for himself. When a business fails there is always damage done to others beside the one we recognize as failing. Bad financial conditions, crop failures or epidemics in distant countries, affect each of us individually. Each of us then has an interest, not alone in his own business, but in the success of other businesses. Laymen, no matter what their occupation may be, have an interest in medical economics. There is no reason for maintaining the pose that medicine is too scientific a profession to possess a real economic side. If we fail to admit it, laymen should regard us as peculiar.

In any particular field, there is only a certain volume of business, either developed or undeveloped. At times a line of business may go along in very hard circumstances for years, because the major part of its possibilities remain undeveloped. There are many striking examples to illustrate the fact that the recognition and development of the latent portion of a business has been

as profitable as the discovery of a new business. Every business, then, should be alert to recognize its undeveloped possibilities, and Medicine is no exception.

In delivering health service to the people there is only so much business to be done. Medicine is still very largely an undeveloped business. This is not suggesting that physicians undertake the exploitation of the public. A serious sickness made lighter, a handicap reduced, a life saved, an epidemic averted—all are well worth seeking by the layman. He surely receives full value for his money when buying health service.

So far as society is concerned, it should be remembered that there is not a poor man who possesses perfect health. There is no greater factor in the continuation of poverty and misery than illness, either physical or mental. If there is to be a reduction of poverty and dependency, it must come through a wider utilization of medical service.

Physicians have not been active enough in popularizing their business. Society today is seeking to avail itself of the advantages of modern Medicine. There is a serious need that Medicine develop properly centralized organizations to canvass the situation, investigate the possibilities and bring the public and the profession into proper liaison.

\*See the Voting Coupon on advertising page 48.

Physicians sometimes complain that certain health officers, bureaus, foundations, etc., are usurping the prerogatives of practitioners. This is true in some instances, and seems to be due to the efforts of laymen to secure the benefits of Medicine. At times physicians permit outsiders to see the opportunities first and, instead of leading the movement, they are like merchants whose service is too slow, so that possible customers are not entirely satisfied. What is usually needed is, not so much to suppress the movement, as to develop it properly and outdistance it in rendering satisfactory service.

#### PROFESSIONAL COOPERATION

There should be further development of a spirit of cooperation among practitioners, in spite of the commendable progress that has already been made in this direction. Physicians must feel their partnership in "The Medical Business" and the necessity to act as partners should.

In many small towns, practitioners are in distress because the better-able-to-pay patients go to larger cities for service. All physicians receive practically the same college training and they all have access to exactly the same journals and books. Any difference in skill or knowledge arises because one man attends medical meetings, reads more widely and wisely, visits clinics, enters into consultations, etc. None of these activities is closed to any of us. If those men located in any small town would cooperate, they could render service nearly if not quite equal to that offered by the city man.

This cooperation need not necessarily be in the nature of a "clinic" or "group." Every small town is a potential "Health Center." It has advantages of its own to offset any the metropolis is presumed to possess. The present position of small towns in things medical is largely due to the failure of those located there to grasp their business opportunities. Men located in even the most outlying districts could very easily be an integral part of the district health service.

The large city is a good business center, because those engaged in business there cooperate to make the place attractive to outsiders. Most large cities depend upon the business of outsiders to a very large extent. The theatres, stores, hotels and factories may engage in keen rivalry, but if some business man, in any large city, were

to carry this rivalry to the point where he began to "run down" the qualities, honesty and capabilities of others in his own town, he would hurt the community and his own business.

There is no reason why any town is not a success, except that it lacks attractions. If another community develops attractions, the contrast becomes more apparent. There is nothing to prevent any community being a health center of some magnitude, except the failure of those in the community to cooperate and enhance its attractions. The success of any conspicuous center depends upon the attractions of that center and the failure of competing points to become as attractive.

Recently I visited several cities and, in almost every instance, I heard, when talking to physicians, that all the other men in the community were not up to standard. After the trip I concluded that not one of those communities had recommended itself. If a community will not recommend itself, it can not expect any one else to recommend it. There was not an instance in which there were too many practitioners in a community. There was no reason why there should be such bitter competition, except that, usually, several men were attempting to cater to a narrow field of developed business and there was neglect of all organized effort to utilize the greater field of undeveloped business lying about them.

#### MEDICAL ORGANIZATION

Medical organizations should undertake more extended propaganda as to the advantages of medical service. Every practitioner should appreciate that he is a part of his medical organization and he must, himself, take an active hand in this work. Each one can well ask himself what he is doing and why some one else should do more than he is willing to undertake. This would benefit the profession. It would also benefit society.

One point that especially needs emphasis is that, today, society carries a heavy load of pauperism and inefficiency, and only by intelligent work can this be reduced in the future. If Medicine is properly developed and encouraged, it is possible to devise some means of adequate health service, and thus do away with this burden. Industry should be plainly shown that this can not be brought about by socializing Medicine and pauperizing the public.

State medicine is the politicians' effort to take advantage of the people's need. The public desires adequate health service. State milk dealers would have been developed if those engaged in the milk business had failed to direct and develop their own business properly. Society pays for an improved milk supply. Society will pay for an improved medical service when those who know most about the medical business see to it that such service is available and popularized.

#### GENERAL PRACTICE

Insofar as possible, medical service must be such as best to satisfy the customer. Research and diagnosis are commendable, but the average man desires restoration to comfort, safety and working efficiency.

For the very great majority of practitioners, "general practice" should be the aim. Medicine can never keep in touch with the public and its pocket book unless service is satisfactory to the customer. It is true that, at times, it would be better if the customer were to receive higher-grade service. However, it is seldom that this can be brought about by a flat denial of that for which he seeks, while the doctor follows his own fancies of research and examination. Imagine, for instance, yourself going to buy a small car and having the dealer almost refuse to discuss the car you

feel meets your needs and pocket book, while he dwells upon the advantages of a grand coach.

It is better business, usually, to comply with the demands of the buyer, if at all reasonable, and then undertake to show him the advantages of a better service. This point has two applications. Many practitioners fail because they are too unsympathetic with the viewpoint of the public, which surely has a right to buy what it wants, at least part of the time.

In another application it meets the fact that we have sold the customer ideal service, hospitals, nurses, consultants, etc., so that, with many of them today, a satisfactory service by general practitioners is scorned, while they employ visiting nurses, insurance doctors, dispensaries, midwives, etc., all usually lauded by propaganda supplied by the corporation that collects for the service; or the patient throws himself upon those great municipal, endowed or charitable organizations that provide what is presumed to be perfect service, including the paid service of laymen, and the unpaid service of physicians. We have allowed the public to ride in free busses with luxurious fittings, instead of boosting the advantages of a small car that each can afford to pay for.

4352 Grace St.

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#### CONTINGENT MEDICAL FEES

*The development of a contingent fee or deferred payment plan into a standard practice, recognized throughout the profession, might well be the solution of the border-line charity case.*

*The doctor who supplies a vital need in time of distress, to an eventually successful individual, certainly holds a share in the later success, just as materially as he would had he invested money or services in the eventual success of a corporation.—DR. V. A. CHAPMAN, in Med. Economics, Sept., 1929.*



# THE SEMINAR

CONDUCTED BY

MAX THOREK, M.D. (Surgery)  
GEORGE B. LAKE, M.D. (Medicine)

[NOTE: Our readers are cordially invited to submit fully worked up problems to the *Seminar* and to take part in the discussion of any or all problems submitted.

Discussions should reach this office not later than the 1st of the month following the appearance of the problem.

Address all communications intended for this department to *The Seminar*, care CLINICAL MEDICINE AND SURGERY, North Chicago, Ill.]

PROBLEM NO. 1 (MEDICAL) 1930

Submitted by Dr. J. Paul Jones,  
Camden, Ala.

(See CLIN. MED. AND SURG., Jan., 1930,  
p. 59)

**Recapitulation:** A man, thirty years old, who had lived in the South for several years and whose family and personal history was essentially negative, had, in May, 1929, an attack of fever, with general aching and extreme prostration, but without gastrointestinal symptoms or localized pain or tenderness. This attack subsided in a few days, leaving the patient very weak, but recurred after about three weeks, when the symptoms followed a similar course. Several such attacks occurred. In July he began to have pain over the liver, radiating under the right shoulder blade. He has lost a few pounds in weight.

The general physical examination was essentially negative; the urine showed a few pus cells and granular casts; the blood revealed 80 percent of hemoglobin, with essentially normal red and white cell counts, but a differential count showed a moderate, relative lymphocytosis and from 7 to 18 percent of eosinophiles. No malarial parasites were found. The Wassermann test

was negative. Serologic tests were negative for typhoid, typhus and *B. abortus*. Numerous *Lambia intestinalis* were found in the stool on July 30.

**Requirements:** Probable diagnosis and suggested treatment.

DISCUSSION BY DR. L. REZNIKOFF,  
SOMERSET, PA.

**Probable Diagnosis:** Several attacks of fever, with extreme prostration; pain in the liver region, radiating under the right shoulder blade; eosinophilia; and stool findings, speak for abscess of the liver, caused by intestinal parasites brought to the liver either by the portal circulation or by the lymphatics.

However, the abscess (or, probably, multiple abscesses) must have been deep-seated, otherwise physical examination would reveal a bulging in the liver region. Occasionally hepatic abscesses, caused by protozoan organisms, occur without any evidence of dysentery.

During the first attacks of fever, long before the pain in the liver region was felt, there must have been suppurative pyelophlebitis or portal pyemia, which does not cause much enlargement of the liver, and which is very difficult to diagnose.

It is possible that, when the intestinal parasites infested the portal vein, clots of blood were formed, which later dispersed throughout the liver in the form of infective emboli, resulting in multiple hepatic abscesses.

**Suggested treatment:** An exploratory puncture would help to make a diagnosis.

Intestinal parasitides, such as emetine, thymol and others could be tried, and, if no relief is obtained, an exploratory laparotomy

should be performed. If abscesses are found, drainage should be established.

#### DISCUSSION BY

DR. DIETRICH KLEMPNER, CHICAGO

As to the *Lamblia intestinalis*, this organism is doubtfully pathogenic and, while one cannot be entirely sure, it probably does not cause the eosinophilia.

There appears to be a recurrent infestation by a parasite of considerable toxicity, with what seems to be a late localization in the liver. Is it *trichinae*? Probably not, as there is no history of enteritis; no muscle pains; no puffiness; and why should this organism attack the liver? The blood picture does not suggest *amebic abscess*, in which we would expect to find polynucleosis and diminished eosinophiles.

These are purely negative suggestions, but I lack time to pursue the study further.

#### COMMENTS BY DR. JONES

When I sent in this problem, I asked for immediate help, and Dr. Geo. B. Lake wrote to me suggesting that it might be a case of undulant or Malta fever, and recommending intravenous injections of neutral acriflavine and later, perhaps, intravenous injections of neoarsphenamine, to clear up the *Lamblia intestinalis*.

Several serologic tests were negative for *M. melitensis* and *B. abortus*, but further questioning elicited the facts that he had been in the habit of drinking a great deal of milk and that several cases of undulant fever had occurred in the neighborhood where he had been living, so I gave the neutral acriflavine, as suggested, in November, and he seemed to be better, though his blood still showed a moderate, secondary anemia and his stools still contained *L. intestinalis*. He would not take the neoarsphenamine.

I was ill during December and the early part of January and this patient consulted another physician, so I have not been able to follow his case closely. I saw him recently, however (Jan. 27, 1930), and he said he had been working for several weeks and that he had only one slight attack of fever, about one month after the acriflavine injections. The other doctor seemed to feel that he had had Malta fever, although the agglutination tests were never positive, and that the acriflavine was what stopped the febrile attacks. He had been taking a

tonic and, at that time, had gained about seven pounds in weight.

#### CLOSING DISCUSSION BY

DR. GEO. B. LAKE, CHICAGO

Upon receiving Dr. Jones' report, I wrote him at once that this case presented the clinical features of undulant or Malta fever and suggested that he give three intravenous injections of a 2-percent solution of neutral acriflavine, the first to contain 0.2 Gm. of the drug; the second, 2 days later, 0.3 Gm.; and the third, 3 days after the second, 0.4 Gm., as outlined in an abstract on page 350 of the May, 1929, number of CLIN. MED. AND SURG. Dr. Jones has reported the results of this treatment.

I further suggested that, after the febrile attacks were controlled, an attempt be made to eradicate the *Lamblia intestinalis* by means of small (0.2 to 0.4 Gm.) doses of neoarsphenamine, intravenously, or with acetarsone, given by mouth, as recommended for the treatment of amebic dysentery, in an abstract on page 434 of the June, 1929, issue of CLIN. MED. AND SURG. This was not done, as noted, but Dr. Jones tried enemas of potassium permanganate and silver nitrate solutions, as well as some proprietary pills, recommended for dysentery, without results.

Dr. Reznikoff's suggestion as to liver abscess seems to have insufficient foundation: The fever was distinctly not of the usual septic type, but occurred in paroxysms, lasting several days, with periods of about three weeks of normal temperature between them; there were no marked signs or symptoms in the liver region; and the *Ameba histolytica*, the common cause of liver abscess, was not reported as found. This does not, of course, entirely rule out the possibility of the presence of this condition. The patient seems not to be entirely well, and there is still a need, one would think, for a good deal more study on the case.

The disease variously called Malta, Mediterranean and undulant fever was formerly supposed to be confined to the Mediterranean basin and to be transmitted only by the milk of infected goats. Now we know that the causative organism belongs to the genus *Brucella*, which contains several other pathogenic members—notably Bangs' bacillus or *Brucella abortus*—and that these are found in cattle, sheep and hogs, as well as in goats.

The U. S. Public Health Service suggests that all infections with this group of organisms be studied together, under the general name of **Brucelliasis**. In 1928, 649 such infections were recognized and reported in the United States, and it seems highly probable that an even larger number were not diagnosed nor reported, or both.

The organism is most commonly transmitted by drinking the milk of an infected cow. Careful pasteurization of all milk will obviate this possibility. It seems possible to contract the disease by handling infected animals or their carcasses. The symptoms and course of the malady are fully described in all good textbooks of the practice of medicine.

The mortality from brucelliasis is not high, but the disability and even suffering is frequently great and may last for weeks or months. The disease is not so prevalent as to constitute a major health problem, but there are many more cases in this country than have, hitherto, been recognized.

As in all contagious diseases, the chief concern is with prophylaxis, by removing sources of infection. For this reason, all physicians should be on the lookout to make diagnoses as promptly as possible, and should report all cases discovered to the authorities, so that a search may be made for the origin and suitable steps taken to prevent further spread.

The treatment has been largely symptomatic, resembling that of typhoid fever, and has been decidedly unsatisfactory. The only attempt at anything resembling specific medication is that with neutral acriflavine, as outlined here.

**Lambliia intestinalis** (or *Giardia enterica*, as it is sometimes called) is an intestinal parasite of man, of world-wide distribution and not-fully-demonstrated pathogenicity. This may have been a factor in causing the eosinophilia, mild, secondary anemia and other symptoms in this case, but I strongly feel that the entire picture is not before us and that other etiologic factors must be sought. A careful examination of the stools, collected at suggested by Dr. A. H. Waterman, in CLIN. MED. AND SURG. for Nov., 1928, p. 830, might show some interesting revelations.

It is said that the administration of bismuth salicylate often causes the *Lambliia* to disappear from the stools, temporarily; and I have seen it cleared up for considerable

periods by intravenous injections of neoarsenamine. I was not, however, convinced that the good results following this latter treatment were due wholly, or even chiefly, to the disappearance of these parasites.

#### PROBLEM NO. 3 (MEDICAL)

PRESENTED BY DR. GEO. ACHESON,  
ST. MARTINS, N. B., CANADA

The patient is a man, in his 70th year; height 5 ft. 10 in.; weight, 5 or 6 years ago, averaged 175 pounds; last 3 or 4 years, 167; and recently 161 pounds.

**Family history:** Mother died at the age of 76, from cancer of the stomach; one maternal uncle died in early manhood from some wasting disease, probably tuberculosis; another late in life from cancer of the stomach; another between 60 and 70, from chronic bronchitis and asthma; and an aunt in early life, cause unknown; one sister is dead from chronic rheumatoid arthritis.

**Personal history:** Had mumps in childhood; severe attack of so-called malarial typhoid as a young adult, followed by typical malarial attacks at irregular intervals for two years; a very mild attack of measles when 21; fairly severe attacks of lumbago, at irregular intervals, during the last 40 years; over two years ago had a large carbuncle in the suboccipital region; otherwise has always enjoyed good health, except for a mild attack of influenza last winter.

**History of present illness:** The patient recovered slowly after the carbuncle, but at length apparently regained his usual health and vigor. About a year ago he noticed that he was becoming short of breath and was more easily tired than formerly. His blood pressure, some little time before the carbuncle, was 175/90; but afterwards came down to 135/70, and has varied since then between that figure and 160/75. Dyspnea, lassitude and weakness have gradually been increasing, although he has continued at his work.

**Present conditions:** Lack of energy; tires easily; impairment of memory and power of concentration; sallow-looking, with decided pallor at times.

**Digestive system:** Throat and mouth normal, except for loss of 8 or 9 teeth; no artificial denture; appetite fair; takes only plain, mixed diet; digestion good; gastric achylia; always a good deal of intestinal flatus; bowels fairly regular, and stool of

normal size and consistence; rarely has diarrhea.

**Respiratory system:** Nothing abnormal, except marked dyspnea on slight exertion; can walk slowly on the level or down grade without increasing the respiratory rate, which is usually 16 or 17, but hurried movement or going up even a moderate incline increases the respirations to 30 or 40 per minute.

**Cardiovascular system:** Heart normal in size; very faint, soft, systolic murmur at apex, and doubtful presystolic bruit along sternal border; pulse, when at rest, 68, after moderate exertion, 80 to 100, with considerable palpitation, returning to normal in 2 or 3 minutes; arteries not sclerosed; no edema; negative Wassermann test; systolic blood pressure, at one examination 175, and at another, two hours later, 145, with dias-

tolic 70. Blood count: hemoglobin 60 percent; erythrocytes 3,800,000; leukocytes 5,000; neutrophils 45 percent; small mononuclears (lymphocytes) 52 percent; large mononuclears 1 percent; eosinophiles 2 percent; macrocytes and microcytes present; some polychromatophilia; an occasional nucleated red cell. Two weeks later, hemoglobin 63 percent; erythrocytes 3,300,000; leukocytes 7,000; occasional normoblast, megaloblast and stippled cell; no poikilocytosis.

**Renal system and uranalysis:** Nothing abnormal. Other systems show nothing of importance bearing on the case. X-ray and fluoroscopic examinations of chest and abdomen show everything apparently normal.

**Requirements:** Discuss this case as to (1) diagnosis, (2) etiology, (3) prognosis and (4) treatment.

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### STAMPS AND CIVILIZATION

Take a postage-stamp, and stick it on a penny. Now climb Cleopatra's needle and lay the penny flat, postage-stamp uppermost, on top of the obelisk. The height of the whole structure may be taken to represent the time that has elapsed since the earth was born. On this scale, the thickness of the penny and the postage-stamp together represents the time that man has lived on earth. The thickness of the postage stamp represents the time he has been civilized, the thickness of the penny representing the time he lived in an uncivilized state.

Now stick another postage-stamp on top of the first to represent the next 5,000 years of civilization and keep on sticking on postage-stamps until you have a pile as high as Mount Blanc. Even now the pile forms an inadequate representation of the length of the future which, so far as astronomy can see, probably stretches before civilized humanity. The first postage-stamp was the past of civilization; the column higher than Mount Blanc is its future. Or, to look at it in another way, the first postage-stamp represents what man has already achieved; the pile which outtops Mount Blanc represents what he may achieve if his future achievement is proportional to his time on earth.—From "The Universe Around Us," by SIR JAMES JEANS.

# THE CLINIC

## DERMATOLOGY

### Acne Vulgaris

By ISAAC R. PELS, M.D., Baltimore, Md.

IT IS occasionally surprising that patients volunteer statements which indicate mistakes in diagnosis of acne, in consequence of which an irritating and unsuccessful therapy has been instituted. Therefore it would seem pertinent to submit some comments on the disease, together with a few general remarks concerning etiology, symptomatology and the rationale of treatment, to which I shall add some further suggestions.

The patient we will study is a boy, aged 16, who was first seen in March, 1929, complaining of an eruption of the face.

His family history is unimportant, insofar as any skin diseases were concerned, except that his father had blackheads and pimples in earlier years. (The father was present on the first visit but exhibited no signs of previous acne).

The past history of the patient was of no significance, except that his tonsils had been removed at the age of five, his teeth required constant attention, and he had spent five months in a sanatorium, on account of probable pulmonary tuberculosis.

An interesting fact, which I shall discuss, was a definite resemblance, physical and temperamental, to the maternal side of his family.

The onset of his present illness was noticeable about three years ago. There were blackheads, appearing from time to time; but more noticeable were pimples. The condition became worse gradually, and there were no subjective or associated symptoms. He treated his skin with a well-advertised soap, recommended by the manufacturers for acne.

He is a slender, poorly-developed boy, weighing 111½ pounds, and of medium-dark complexion. There are no stigmata

present; dermatographism is normally active; there is moderate pityriasis of the scalp; the thyroid gland is not enlarged; the tongue is slightly coated; the eyes show slight divergence—outwards; there is no general glandular enlargement; the finger nails are normal; and there are no abnormalities of hair growth or of distribution. The skin, in general, is moist and, in the affected areas, greasy or oily.

The genitalia and the perineum are normal; and there is a slight systolic murmur, not transmitted, at the cardiac apex. The lungs were not examined; and the abdomen shows no abnormalities on inspection nor on palpation. The chest and upper back show a few comedones, papules and pustules, as well as scars, chiefly diffuse and discrete.

The face is of somewhat heightened color and the skin is shiny and oily. There are a number of typical comedones on the forehead and nose, extending also upon the neck. More pronounced are papules and pustules, grouped, in some instances, in small patches up to 1.5 cm in diameter. Fairly numerous, irregularly-pitted scars are present, especially on the cheeks; and there are a few lesions (papules and pustules, chiefly) on the ears and posterior to them. There is regional adenopathy—glands just palpable—in the submental and lower jaw regions. This boy illustrates the incidence of acne during the onset of puberty.

Without discussing the various views of the etiology of this very common cutaneous disease, it may be stated at the outset that conceptions are gradually changing. While most observers are inclined to appreciate the importance of microorganisms in the etiology, it is generally conceded that the



presence of bacteria is an expression of symbiosis and of secondary invasion. Attention, however, has become drawn more intensively to the general medical aspect of these cases; and it is almost trite to state that we are passing through an era of calling upon the gastrointestinal tract, the endocrine system and its correlated nervous controls, the metabolic functions and the autonomic nervous system, to furnish the necessary working material on which to base claims for etiologic consideration.

How much heredity plays a part has, as yet, merely been surmised. We do not know what an invocation of the mendelian law might reveal here. Our patient, for example, bears a resemblance to his mother's side of the family. Indeed, we have found, merely from taking histories, that the young patients affected with acne resemble, in a very striking percentage of cases, the parent of the opposite sex; and if a parent of the same sex, this parent (as in this case) frequently gives a history of also having had acne. I have seen this condition exist in one of twin girls who resembled her father; the other girl was free of acne and resembled more the mother. Naturally, this kind of observation must be considered with reservation; and, unfortunately, we can draw no conclusions from it with regard to therapy.

Nor can we attribute too much importance to gastrointestinal forces and conditions, except as *contributory* factors, because there are too many exceptions. Thus, constipation may frequently be ruled out, but we do get voluntary statements that the eating of rich (fried, greasy) food and of candy (especially chocolate) unquestionably aggravates, but does not necessarily provoke, the eruption.

The fallacy of poor health is supported by the fact that we have seen college students, living under fairly ideal conditions of food, hygiene, athletics, etc., show a high incidence of acne.

The lack of sexual practices—an antiquated and, by many, an accepted view of causation—can readily be disproved, despite the fact that married couples are, for the most part, free of acne. We have, however, noted certain exceptions, especially with women. This should negative the unfortunate advice given, even by physicians, for young individuals to practice the sexual act in order to overcome the tendency to acne.

These remarks naturally lead me to the statement that, based on personal observations, I believe that acne is a disease associated with, if not caused by, the onset of puberty and of progressive adolescence. This is readily proved in the case of females who, with the development of the breasts, the growth of hair and, especially, the onset of the menses, exhibit a few comedones associated with seborrhea of the face, scalp, chest and back in mildest degree. However, this is not universal and the degree necessarily varies with individuals. We may see this change, rarely, before the age of ten. Yet I cannot state why certain individuals are more affected than others, and, indeed, I believe that nearly every one develops some slight signs or symptoms of acne at the beginning of puberty. Perhaps biologic researches may some day give us some real clue.

Certainly the spontaneous disappearance of symptomatic acne between the ages of twenty-five and thirty gives some suggestive ideas regarding metabolic adjustment. Perhaps this may mean that human beings, after thirty years of age, are really old men and old women.

#### OBJECTIVE SYMPTOMS

The objective symptoms of acne may be readily verified by inspection, keeping in mind the essential changes to be looked for: Seborrhea (oiliness, greasiness, either moist or dry, usually the former); comedones (sometimes whitish cysts, termed milia); papules; pustules; and irregularly pitted scars. This may be termed the syndrome of acne. There are, of course, many varieties, in character and in degree, of the comedones, papules, and pustules; and the scarring is dependent upon the intensity and degree of the cutaneous changes.

The comedones also vary in size, their color (dark) being attributed to chemical changes of the sebum (sebaceous gland excretion), but at times they are grayish or ivory white when this chemical change has not taken place. It is only when a comedone or sebaceous gland has become inflamed that we have to deal with a papule. Sometimes one can discern the comedone in the inflamed elevation, but frequently this is not seen and the papule is firm, shotty and apparently lying well beneath the skin surface, like a "blind boil."

The pustules merely add a higher degree of inflammation to the picture, apparently due to the invasion and presence of second-

any organisms. Thus, the papule is capped by a pustule, is semi-globular or acuminate in shape, and is to be distinguished, if possible, from the pustule produced by the ingestion of bromide or iodide-containing preparations. We have endeavored to base the distinction on the fact that bromide or iodide acne reveals lesions very similar to acne pustules, but characterized by a more pronounced inflammatory change, larger size, and possessing, frequently, an inflammatory areola.

A consideration of the pustular syphilide and of variola is obviously not germane.

Lastly, we may find tiny pittings or actual bridging between lesions. These scars are always irregular; and this irregular pitting (much like tuberculosis scars) is to be distinguished from the uniform, slightly scooped scars of antecedent varicella and variola.

As may be expected, there are variabilities in the degree and in the extent of the distribution of acne. We do not find the so-called syndrome, as outlined in this case, expressed in every instance. Any clinician having a fair amount of material at hand could exhibit instances where the comedones predominate, without complications, and others varying from this condition to that revealing discrete papulo-pustules, but in the later stages one can usually demonstrate scar formation. Nor is the face, alone and always, the site of predilection. I have seen instances of involvement of the chest and back (shoulders) only, and this to a surprising degree of late sequelae. Indeed, one may be surprised at the absence of several of the four or five essential changes in the skin; but, in the main, at least two or three may be determined after careful inspection.

Of primary significance, however, the seborrheal habitus and the presence of comedones or of papules and papulo-pustules should suffice for confirmation of the diagnosis.

In summary, therefore, I would submit that acne is diagnosed practically only in young adolescents and more rarely in young adults. Inspection alone suffices to verify the syndrome, in part or in whole, as previously outlined, in order of evolution: seborrhea, comedones, papules, papulo-pustules, and irregularly pitted scars.

#### TREATMENT

It should be an axiom that every patient having treatment for acne deserves

to be considered as an individual case. Obviously, the degree of cutaneous changes and the general medical aspects of the patient require particular consideration. The approach to therapeutic endeavor, therefore, demands foremost a consideration of the factors which apparently contribute, not necessarily to the cause alone, but particularly to the precipitation and to the aggravation of the apparent dermatologic variations from the normal.

The correction of any outstanding physical and physiologic conditions should tempt the medical advisor to exercise his most intimate medical skill. Physical defects, undernourishment, loss of weight, lack of appetite, constipation, gastric upsets, poor oral hygiene, improper physical hygiene, etc., are so obviously relevant in this connection as to merit merely a mention. Some observers claim that proper hygiene of the scalp, so frequently neglected, should be insisted on, because the presence of pityriasis and seborrhea of the scalp may properly be considered as contributory factors in stimulating an acneform condition.

The use of drugs, where definitely indicated, is always a worth-while consideration. Empiricism here has had its fling and many physicians still believe that certain drugs have a beneficial influence. In consequence, arsenical preparations, alkalis, dilute acids, yeast preparations, calcium preparations, liver extract, vaccines, non-specific protein therapy, etc., have been recommended, despite the fact that no specificity of action can be credited to them; rather, an indirect effect on metabolic functions is a more satisfactory conception.

It would not be relevant to discuss here all methods of local treatment which have run the gamut of years of experience and which have been evaluated by results encountered. It would be more pertinent to indicate what my experiences have been. In the light of our present knowledge of acne, the local therapy is of great importance. The choice of any one method should not be the sole guiding factor.

I believe that every case of acne should have, primarily, periodic "shampooing" with a bland, non-medicated soap and water, at least twice daily; such procedure cleanses the skin of seborrhea and acts as a stimulant. However, it has been claimed that this method may, in some instances, provoke increased sebiagogic action.

As a corollary to this, removal of comedones and puncture of pustules should be practiced as a regular operative procedure. Since every comedone is a potential papule and possibly pustule, and since pus requires drainage, these manipulations are essential. An untouched pustule almost invariably leaves a pitted scar as a relic, while incision with a pointed needle or, preferably, with a von Graefe knife leaves no macroscopic sign of damage, contrary to the common belief that surgical procedures of this nature are the cause of scarring.

Following this, the skin should be treated with an ointment, cream or lotion containing sulphur, resorcin, tar, or salicylic acid, in concentration sufficiently low to cause no irritation, especially if roentgen therapy is employed. Many operators are emphatic in avoiding the use of medicated preparations in connection with roentgen-ray treatment. The employment of lotions, liniments or salves should depend upon the degree of dryness (or oiliness) of the affected skin. I will give a few examples of such preparations.

Sulphur has been and still is, one of the most popular ingredients for use in acne. It has a quieting effect on the sebaceous activities and, if combined with powders and not irritating, usually gives encouraging results. Sulphur was probably popularized through the well-known Kummerfeld lotion, the origin of which, in the eighteenth century, is credited by Pagel to a renowned German actress (Madame Kummerfeld), although the exact ingredients were not known. Whether one employs ointments or lotions would be determined by the degree of seborrhea present. In the case under consideration, we would give a lotion, on account of the predominating oiliness, as follows:

R	Sulphuris praecipitati.....	10.0
	Zinci Oxidi .....	20.0
	Talc Veneti .....	10.0
	Glycerini .....	10.0
	Spiriti Camphorae.....	3.4
	Olei Heliotrope.....	1.8
	Pulveris tragacanthae.....	1.8
	Liquoris Calcis q.s. ad.	200.0

And, if a more antiseptic and slightly desquamative effect is desired, resorcin (1 percent) may be added, keeping in mind the possibility of irritation from this effect.

This lotion should be applied by dabbing on, night and morning, and even more fre-

quently, if possible, preferably after a preliminary shampoo with hot water and soap.

If a more astringent and dehydrating effect is desired, the so-called "lotio alba," modified as follows, may be tried:

R	Sulphuris praecipitati.....	8.0
	Potassii sulphuratis.....	6.0
	Zinc sulphatis.....	6.0
	Talc Veneti.....	20.0
	Spiriti Camphorae.....	3.4
	Glycerini .....	10.0
	Olei Rosae.....	1.8
	Pulveris tragacanthae.....	1.8
	Aquae destillatae q.s. ad.	200.0

If these lotions are too drying in their effects, one may try a compromise between ointment and lotion, such as a liniment. The first-mentioned preparation may be written with olive oil or oil of almonds in 25 percent bulk of the vehicle. When carefully and skillfully exhibited, this gives a splendid preparation which is very satisfactory and eliminates the scaling and consequent "roughness" of the skin, which is likely to result from use of the original preparation.

Ointments may be prescribed in varying combinations, depending upon the physician's desire to produce certain results. Primarily, they are used for dry skin. If desquamation is desired, salicylic acid and resorcin may be added; and, if stimulation, some form of tar may be used. Soap, such as the well-known *Sapo viridis*, may be tried, in combination with an animal fat or a vegetable oil or fat, depending upon the degree of penetration desired.

For example:

R	Sulphuris praecipitati	
	or	
	Sulphuris loti.....	1.5
	Camphorae pulveris.....	0.8
	Olei lavendulae.....	0.2
	Adipis lanae hydrosi.....	10.5
	Unguenti Aquae Rosae	
	q.s. ad. ....	32.0

To which may be added

Acidi salicylici.....	0.6 to 0.8
or	
Resorcini .....	0.3 to 0.4
or	
Liquoris carbonis	
detergentis .....	1.0 to 1.2

or the following ointment may be used:

<b>R</b> Sulphuris praecipitati .....	1.4 to 1.5
Acidi salicylici .....	0.6 to 0.8
Camphorae pulveris .....	0.8
Olei rosemarini .....	0.2
Adipis benzoinati .....	10.5 to 10.7
Unguenti Aquae Rosae q.s. ad.....	32.0
For desquamation or a peeling salve:	
<b>R</b> Resorcini .....	0.6
Sulphuris praecipitati .....	1.5
Acidi salicylici .....	1.5
Camphorae pulveris .....	0.8
Olei lavendulae .....	0.2
Saponis viridis .....	12.4
Adipis lanae hydrosi q.s. ad .....	32.0

It may be necessary to change from a drying medication to an emollient one; and sometimes merely cold cream applications are all which are required to give a soothing effect. I have stated, elsewhere, that one must keep in mind the possibility of over-stimulating a seborrheic skin, resulting in over-oiliness.

If I were asked to select any one exclusive method of treating acne, excepting roentgen-ray irradiation (the method of choice), I should be inclined to advise shampooing, combined with operative removal of comedones and incision of papulopustules, as productive of most gratifying results. Incidentally, I have never found vaccines of much value, except in cases over-complicated with secondary infection (pustulation). Indeed, vaccines apparently have no primary rationale here, based on etiologic considerations; and in the experience of most dermatologists, they have been entirely discarded.

Finally, the use of physical or photochemical agents is of such importance that I should prefer them, in the light of experience, to the exclusion of all other methods. The groundwork for these methods—ultraviolet and roentgen-ray irradiation—should be based on a clear rationale.

As for the ultraviolet irradiation, it may be stated that, on account of superficial penetration, this method can be recommended only as an adjuvant, particularly for its tonic effects. The results are good, even excellent, but not lasting, because the basic changes in the skin are not sufficiently and permanently affected.

Contrariwise, the roentgen-rays have a profound effect on what is conceded to be

the pathologic condition of the skin; namely, hyperactivity of the sebaceous glands. In other words, we treat, by this method, the effects of the disease, but not the cause. Indeed, it should be remembered that the cause of acne is still not fixed and definite and, until a method or drug is found to influence the changes indicated under etiology, we must have recourse to agents which influence the pathologic changes. Thus we effect a break in the condition of cause and effect and, theoretically, put a stop to both inciting and precipitating agents.

As a matter of fact, the results are usually very satisfactory. The oiliness of the skin lessens; the texture improves (with a smoother surface); and the formation of comedones is curtailed.

The complications and disadvantages of this method are insignificant. There may be spotted pigmentation (much like freckling, of deep-brown to black color) and, rarely, a fine lanugo or downy hair growth, both of which are of temporary duration. However, it should be understood that roentgen-ray therapy causes definite, if not permanent, changes in the skin which, in the light of present-day experience, are not of serious import\*.

I would conclude that some operators also incline to the view that roentgen irradiation should not be complicated by other methods of mechanical manipulation (such as shampoo of the skin and treatment of comedones, pustules, etc.), basing their belief on the irritating effects of combined methods. I have never been able to convince myself of the advantage of such exclusion and my experience has been the reverse of this, provided, of course, that the manipulations and the use of the shampoo are so properly supervised as to prevent such irritation. When this occurs, a temporizing method of procedure may be followed. The skin, under such conditions,

\*Treatments are given on an average of once a week to twice monthly, the number varying with the operator's experience, from a total of about 8 to 15 or 20. The total dosage averages about two erythema units. The length of a course of treatment varies up to several months. A discussion of the technicalities of the methods must be omitted here, on account of the lack of space. Nevertheless, the importance of this is worthy of special consideration, for therein lies the value and permanence of results. Views are constantly changing with regard to this. There is a growing tendency to greater conservatism in dosage and, in our experience, an inclination to longer periods of a course of treatment (without increased dosage).

(Continued on p. 222)

# CLINICAL NOTES AND PRACTICAL SUGGESTIONS

## "Wassermann Fastness" Relieved by Colloidal Mercury Sulphide

**T**HE patient, Mrs. A. G. M., first came under my treatment on August 1, 1924. She stated that, about eight months previous, her husband accidentally bumped against her left clavicle and that two months later a small tumor mass developed, which seemed to be growing larger.

Examination showed a tumor mass about two inches in length, along the attachment to the clavicle of the sterno-cleido-mastoid muscle and extending about one inch above the clavicle along the border of the muscle. No glandular involvement was found and the patient denied syphilitic infection. The x-ray findings of the left clavicle were negative for a bone lesion. The blood Wassermann test was 4 plus.

### Treatment:

August 4 to September 12, 1924, the patient was given 6 injections of neosalvarsan (nearsphenamine), intravenously, and 12 injections of mercury. Wassermann test, September 15, 4 plus.

October 20, 1924, Wassermann test 3 plus.

October 24 to December 3, 1924, the patient was given 6 injections of nearsphenamine, intravenously, and 12 injections of an intravenous mercury preparation.

December 5, 1924, Wassermann test 2 plus.

January 7 to February 13, 1925, the patient was given 18 intravenous injections of mercury.

February 23, 1925, Wassermann test 2 plus.

March 5, 1925, the patient was given a saturated solution of potassium iodide, in increasing doses to 30 minims t.i.d., until May 8, when distressing gastric symptoms

caused me to change to  $\frac{1}{4}$  gr. (16 mgm.) doses of protoiodide of mercury t.i.d., until August 5. The Wassermann test at this date was 4 plus.

August 12 to September 25, 1925, 6 intravenous injections of nearsphenamine and 12 injections of bismuth in oil, in the buttocks, were given.

October 2, Wassermann test 4 plus. The patient was referred for an x-ray study of the teeth for possible apical infection. October 12, x-ray report negative as to the teeth.

January 4, 1926,  $\frac{1}{4}$  grain (16 mgm.) protoiodide of mercury was prescribed three times daily, increased to  $\frac{3}{4}$  grain (48 mgm.) three times daily, until January 20, when I changed to Lipoiodine,  $\frac{1}{2}$  tablet\* twice a day.

March 15, Wassermann test 4 plus.

March 15 to April 23, 1926, 6 injections of silver-salvarsan and 12 mercury and bismuth injections, in the buttocks, were given.

May 3, Wassermann test 4 plus.

January 3, 1927, Lipoiodine,  $\frac{1}{2}$  tablet, was prescribed morning and evening, until March 1, 1927. March 14, 1927, the patient was given 1 cc. of typhoid vaccine, to which she had a slight reaction; March 23, typhoid vaccine, 1.5 cc.—no reaction.

March 1 to May 6, 1927, 6 injections of silver-salvarsan and 6 (each) injections of bismuth and mercury were given.

May 5, Wassermann test 4 plus in the blood; spinal fluid, negative.

On January 9, 1928, the Wassermann test was 4 plus. The patient was put on

\*A tablet of Lipoiodine contains 0.3 Gm. ( $\frac{4}{10}$  grains).



Lipiodine until March 12, 1928. August 1 to December 7, 1928, 20 (each) injections of mercury and bismuth were given.

December 22, 1928, Wassermann test 3 plus.

October 1, 1929, Wassermann test 3 plus.

On October 9, 1929, 3 cc. of Colloidal Mercury Sulphide (Hille) were given intravenously, followed by similar doses on October 14 and 18.

On October 21, 1929, the patient reported that she experienced nausea, chills, fever and malaise following the last injection, so the dose of the colloidal mercury was reduced to 2 cc. on this date.

On October 25, she reported a less severe reaction following the reduced dose, so a further reduction was made to 1 cc. This produced a reaction so slight that the dosage was held at that point and repeated on October 28, and November 1, 4, 8, 11, 15, 18 and 22—a total of 13 injections. The doses on November 4 and 8 were of 1.5 cc. and were followed by slight reactions. The 1 cc. doses caused no reactions after that recorded on October 25.

The reaction that she complained of was such as one frequently finds in patients who are given their first intravenous injection and show such symptoms as headache, chills, fever and pains and aches in the muscles, and which completely disappear within 12 to 24 hours.

On December 2, 1929, the Wassermann test was negative for the first time since she came under my care, more than 5 years before, and it was also negative one month later (January 3, 1930).

A drug which will reverse so persistent a Wassermann reaction as this deserves further investigation at the hands of the medical profession.

EDMUND D. LEVISOHN, M.D.

Chicago, Ill.

[One positive Wassermann test is not sufficient to make a diagnosis of syphilis, unless it is accompanied by unmistakable clinical signs of the disease, but a long history of persistent positive reactions, like this, would seem to sustain the diagnosis, even though the history lacks definite clinical evidence.

In any case, it is interesting to note that this new remedy has the power of relieving "Wassermann-fastness," and such a report

as this suggests that Colloidal Mercury Sulphide should be investigated by those who handle syphilitic patients.—Ed.]

### Epidemic Meningitis Warning

ONE year ago the Chicago Department of Health predicted an outbreak of epidemic cerebrospinal meningitis, which evidently is approaching.

The United States Public Health Service, in a report by Dr. G. W. McCoy says, "Apparently in the past year we have had, in the U. S., a more severe outbreak of epidemic cerebrospinal meningitis than at any other time since the World War and, indeed, we must go back to about 1905 to find the last comparable prevalence of the disease. In general, it has been more severe in the West than in the East."

#### SYMPTOMS

Prodromes are vague, as malaise, headache or coryza. The onset may be gradual or sudden, sometimes with a chill and usually with fever.

The course is attended by fever and brain irritation; an almost constant triad of symptoms—headache, rigid neck and hyperesthesia; vomiting, mental, motor and sensory symptoms, and, in fatal cases, death results from paralysis, convulsions or coma.

#### GENERAL NERVOUS SYMPTOMS

(a) *Headache*, is early, severe and generalized. In children it provokes the short, plaintive, clear *meningeal cry*.

(b) *Hyperesthesia* or hyperalgesia affects the special senses, causing intolerance of light and noise; or general sensation.

(c) *Rigidity of neck and spine*. The head is retracted; marked opisthotonos may be present.

(d) *Contractures of the limbs*. Kernig's sign is present in 85 percent of cases.

(e) *Mental symptoms* occur early, especially in children, and include unrest, insomnia, delirium, sometimes with periods of normal intelligence, and followed by incomplete coma.

(f) *Vomiting* is of the cerebral type; i.e., it occurs without nausea or relation to eating, and is often projectile.

#### GENERAL SYMPTOMS

(a) *Fever* is irregular or remittent, follows no definite cycle and lysis is usual, in cases which recover.

(b) *Blood*: Leukocytosis is early and constant. White cells may number 25,000 to 40,000 per cu. mm.

(c) *Abdomen* is often retracted and scaphoid.

(d) *Urine*: Albuminuria is present in one-third of the cases.

(e) *Skin*: *Herpes* is common, varying from 40 percent to 90 percent of cases.

(f) *Lumbar puncture*: Spinal fluid shows increased pressure, is cloudy due to presence of pus cells, and contains the meningococcus.

#### GENERAL TREATMENT

The patient should be kept in a dark room the head elevated *without flexion*, an ice-bag being applied to the head and spine.

Nutrition is maintained by feeding with the nasal tube or by nutrient enemas, if retraction of the neck causes dysphagia. Other symptoms are treated as they arise.

#### SPECIFIC TREATMENT

##### *Antimeningococcic serum.*

Of 200 cases studied, 194 received antimeningococcic serum. Of these, 103 recovered and 91 died, giving a case fatality of 46.4. Of the six that did not receive treatment, all died. All but three of the 194 serum-treated cases received intraspinal injections and, in addition, 58 received serum intravenously and 6 intramuscularly. Three of the fatal cases received intravenous treatment only.

#### CONTROL MEASURES

1.—Every case and suspected case shall be reported.

2.—The Department shall investigate each case to determine the source of infection and contacts.

3.—Every case shall be quarantined. Chicago is hospitalizing all of these cases for a period of at least two weeks from date of onset.

4.—Concurrent disinfection.

5.—Terminal disinfection.

6.—Contacts must be quarantined for 10 days after last exposure.

7.—Teachers that are contacts must be quarantined for 10 days.

8.—Nurse or attendant must remain on premises.

9.—All children and teachers are excluded from school for ten days following last exposure.

10.—Funerals must be private.

—Bul. Chicago Med. Soc., Jan. 18, 1930.

### Marriott's Syndrome

(A Reply to Dr. Dunton)

**I**N connection with the "Unexplained Death," reported by Dr. Austin S. Dunton, on page 912 of the December, 1929, issue of CLINICAL MEDICINE AND SURGERY, the data given correspond quite closely to *Marriott's syndrome* (gastrointestinal symptoms, in children, caused by middle-ear or mastoid infectious).\*

This condition, if unrecognized, is frequently fatal; but proper mastoid drainage generally relieves the symptoms, promptly and completely.

There may be some other cause for the clinical condition so well described by Dr. Dunton, but none occurs to me at present.

MILES J. BREUER, M.D.

Lincoln, Nebr.

### Injection Treatment of Varicose Veins

**I**N THE London skin hospitals there is no question as to what is the best solution for the injection of varicose veins, and they do not accept anything as worthy of consideration except quinine and urethane.

The formula is:

Quinine Hydrochloride.

(B. P.) .....4 Grammes

Urethane .....2 Grammes

Aq. Dest.....30 cc.

It is suggested that the quinine-urethane injection is the nearest to the ideal that we possess at the present time. It is certain in its operation, producing cures in every case in which it was used. It is not irritating enough to produce sloughing, and does not interfere with the ordinary life of the patient during the course of the treatment.

Douthwaite, at Guy's Hospital, has proved, time after time, that the treatment by quinine-urethane is essentially ambulatory, and the patients are encouraged to engage in sports, etc., and forget about the varicose veins or their treatment.

The object aimed at in injections is, not to produce immediate clotting of the blood, but rather to bring about irritation of the endothelium and underlying vessel wall.

\*See CLINICAL MEDICINE, Nov., 1925, p. 747, for a rather full discussion of such cases.—Ed.

Once this is damaged, clotting will occur automatically.

When the internal surface of the leg is affected, it is quite sufficient for the patient to sit on the edge of a table and allow the leg to hang downward. In this way the veins are congested enough to obviate the use of a tourniquet. Or one may apply a tourniquet to the middle of the thigh while the patient is standing, and then have him lie down. This tourniquet must be released before the injection is made. As a general rule, the less blood in a vein at the time of the injection, the better the result.

Always use a sharp needle that will not push the vein ahead of it, but will enter easily.

Inject against the blood stream. Between injections one week should elapse.

Do not inject more than 0.5 cc. for the first dose, on account of the possibility of an idiosyncrasy to the drug.

Be certain to have the blood flow into the barrel of the syringe before the injection is made and, following the injection, allow the syringe to remain in position for thirty seconds before withdrawal. Apply pressure to the puncture for a minute or two, and then a collodion dressing.

Quinine and urethane does not produce the cramp associated with the injection of other solutions, such as sodium salicylate. On the day following treatment there is a sensation of fullness in the vein, and this, in addition to some aching and tenderness, may persist for three or four days. Veins across bony surfaces swell more after injection than when they are over soft parts.

If the vein is small, such as that below the external malleolus, on the dorsum of the foot, or running across the tendo achilles, there is an immediate reaction and the vein swells considerably. This passes off in a few hours and is of no importance. In these small veins there is a mild burning pain for several minutes.

Edema of the foot occurs in about two percent of the cases, persists for approximately two weeks, and then rapidly subsides. About one month after the injection there may be a "drawing" in the leg, due to shortening of the vein, but this disappears in a short time. Aching in the affected limb is usually not felt after the first injection.

Quinine may be tasted for a few minutes after the dose is given. Fainting or

giddiness experienced by the patient is due to apprehension, and not to the action of the drug.

Some authorities advise the wearing of an elastic stocking or a bandage after the injections.

In the case of varicose ulcers, obliteration of the neighboring veins will result in quick healing of the exposed area.

Varicose eczema responds even more readily to the injection treatment than the ulcers do. One may inject directly through the eczematous area to the underlying vein, and the relief obtained is dramatic.

Recurrences in veins treated by injection have not occurred, although no guarantee can be given that new varicosities will not appear.

In pregnancy, the use of quinine being contraindicated, sodium morrhuate is used, the technic and results being similar.

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### What Has Become of the Clinical Teacher?\*

**I**N TRAVELING from University to University, studying the plan of clinical instruction which is being given to the present-day student of medicine, and coming in contact with the men who are giving this instruction, one cannot help but be impressed with their lack of clinical knowledge and observation and of their ignorance of therapeutics.

The laboratory, in almost every instance, has replaced the clinician, and while there can be no question as to the corroborative value of the laboratory findings, the picture of disease presents certain stigmata which are always present if one is trained to observe; but this, the present-day medical student is not trained to do.

The human side of the practice of medicine has passed; the patient is a case and the study completed by operation or autopsy, or else the patient recovers and becomes a clinical liability, going from clinic to clinic, office to office, receiving a new scientific suggestion in each.

Diagnoses are made by laboratory tests, roentgen-ray examinations, metabolic readings and biochemical studies, all of which are of great scientific interest to the physi-

\*Editorial in *Am. Journ. Surg.*, Nov., 1929.

cian, and the students—but frequently result in little or no relief for the patient.

Our larger university medical schools, many of which are subsidized by the Foundations, have, almost of one accord, accepted for the clinical chairs, young, full-time men who have had little or no clinical experience except that obtained from their hospital residency. Many of these men have the basic training to be good clinicians, had they the opportunity to make the contacts of general practice or special practice, where their livelihood was dependent upon the satisfaction given the patient, rather than their scientific satisfaction and interest in the peculiar case.

Teaching by such men robs the student of that one essential in the art of medicine—the art of inspiring confidence.

The great teachers of the past of clinical medicine and surgery, inspired their students and taught them from their wide experience—they cultivated powers of observation and impressed upon them the clinical picture of disease.

Recently one of our universities appointed as professor of obstetrics and gynecology, a man of but four years' training; another placed at the head of its department of surgery a man who is but five years out of college. What type of practitioner do these institutions expect to turn out? for the man in the field, out on his own, must meet conditions which are never found in a hospital ward. Can we say that the laboratory, research and hospital routine makes up for this lack of experience? It is only by experience that we can gain judgment, and, in the last analysis, it is the judgment of the practitioner for which the patient pays.

JOHN OSBORN POLAK, M.D.  
Brooklyn, N. Y.

### Treatment of Wassermann-Fastness With Colloidal Mercury Sulphide

**P**ERFORATIONS of the palate are not rare, but they are not found with great frequency in private practice. They are more commonly found in large hospitals which conduct charity clinics. Perforations of the septum are more usual, to the extent of the total destruction of the septum, with the subsequent collapse of the entire external nose. One commonly sees, along with destructive lesions of the hard palate,

extensive lesions of the nose, but in the case about to be described the nasal involvement was practically negligible.

The patient presented himself with the essential complaint of hoarseness, of two years duration, growing progressively worse. Speech was limited to a faint whisper.

Examination showed a low-arched palate, with a loss of substance in the median line, extending from a point somewhat posterior to the gingival margin posterior to the attachment of the soft palate, measuring, at its greatest diameter, about two centimeters. Through it were visible the structures of the nose. The edges of the perforation were smooth, indurated, covered over completely with epithelium and showing no areas of denudation. There was an absence of crusts.

In addition to the difficulty in phonation, incidental to perforation of the palate, the patient complained of extreme hoarseness. The larynx showed a mild atrophy of the mucosa, with dryness. There were thin, scaly, black crusts, adhering mainly to the vocal cords. There was no ulceration of the cords or any other portion of the laryngeal mucosa. Aside from the hoarseness, speech was next to impossible for the patient, without the use of a plate occluding the palatal deficiency.

The patient presented himself for treatment in 1925, giving a history of prolonged administration of the arsenicals and iodides, with apparent improvement, of short duration. The Wassermann test was four plus and no spinal puncture was made. A continued course of treatment, consisting of intravenous injections of neoarsphenamine, twice weekly, for a period of two months, followed by mercurial inunctions, brought about a decided improvement in the general condition of the patient, as well as an improvement in the voice, the blood Wassermann test remaining positive.

After a lapse of three months, intramuscular injections of bismuth salicylate, 0.2 Gm. each, and mercurial inunctions, for a period of two months, yielded no better results in changing the Wassermann-fast condition. This course of treatment, continued from time to time for two years, brought about no change in the condition described above.

All other treatment was now abandoned and the use of Colloidal Mercury Sulphide (Hille), 2-percent was resorted to. Intra-

muscular injections of 2.0 cc., twice a week, as well as the oral administration of the same drug for one month, brought the Wassermann reaction down to two plus. After a lapse of one month, during which time no treatment was given, the course of treatment with colloidal mercury was repeated, with the result that a negative Wassermann test was obtained. This condition has now prevailed for nine months, without the use of intramuscular injections of the colloidal mercury or of any other drug. The oral administration of colloidal mercury, 10 drops (0.65 cc.) three times a day, has been continued, however. There has been no evidence of salivation or of any other intoxication, such as is common with the use of other forms of mercury.

While the report of this case would hardly be weighty enough to influence the existing opinions about the treatment of Wassermann-fast patients, it becomes more interesting when one peruses the literature on the subject.

Lord<sup>1</sup> reports, in the *Southern Medical Journal*, a case of a colored woman, aged thirty-five, with a gumma of the pharynx, who received six weekly intravenous injections of arsphenamine, followed by prolonged mercury inunctions, as well as the use of potassium iodide by mouth. After 26 intravenous injections of arsphenamine and intramuscular injections of bismuth salicylate, the Wassermann test remained positive.

The same author reports a case of a white woman, aged thirty-eight, who presented a gummatous perforation of the nasal septum who received treatment for three years, consisting of arsphenamine, ten injections of silver arsphenamine, eight months of potassium iodide, and mercury inunctions. Her lesions had long been healed and treatment abandoned, in spite of the fact that her Wassermann test remained positive. A year after treatment was abandoned she developed a fresh gummatous involvement of the nose. Tobias<sup>2</sup> summarizes the results of 364 consecutive cases of syphilis of all types, in an article in the *American Journal of Syphilology*. Of this group, 13 percent remained Wassermann-fast under all forms of treatment. Under bismuth therapy, sixteen percent remained uninfluenced. He quoted Conrad and McCann<sup>3</sup> who, in a study of 62 Wassermann-fast cases, succeeded in obtaining a negative Wassermann

reaction in 37 percent of this group by the use of intravenous injections of a 1-percent solution of bichloride of mercury, twice a week.

Cole, Druier, and Hutton<sup>4</sup>, in the *Journal of the American Medical Association*, conclude, from a study of 38 patients, the following: The use of mercuricals as anti-syphilitic remedies produced various therapeutic effects, but in 4 instances a beginning stomatitis was noticed after two or three injections. In 20 percent of their group, the patients became worse, 25 percent showed no improvement and, in practically all of them, the effect on the Wassermann reaction was nil.

MAXIMILIAN KERN, M.D.,  
Chicago, Ill.

- 1.—Lord, L. W.: *South. Med. Jour.* xxi, 636-643.
- 2.—Tobias, N.: *Amer. Jour. Syph.* xli, 396-402.
- 3.—Conrad and McCann: Quoted by Tobias, *ibid.*
- 4.—Cole, H. N., Druier, J. R., Hutton, J. T.: *Jour. Amer. Med. Assoc.* lxxix, 1821-1824.

### Strychnine and Alcohol

IT IS a clinical fact that strychnine is the physiologic antagonist of alcohol.

Strychnine, in small or moderate doses, increases the appetite, improves the digestion, deepens the respiration, slows the heart, increases the blood pressure, renders the special senses more acute, keys every nerve and muscle to its highest pitch, exalts the functions of the spinal cord and makes the mind act more clearly and easily. In larger doses it causes restlessness, trembling, stiffness of the neck and jaws, and muscular twitchings. Large doses produce muscular rigidity, dilated pupils, a grinning face and tetanic spasm.

Alcohol produces, first, paralysis of the vasomotor nerves, dilatation of the capillaries and increased action of the heart; in the second stage there is paralysis of muscular coordination and self-control, often accompanied by vomiting; in the third stage, paralysis of the higher centers of thought and will; and in the fourth stage, paralysis of the organic centers of sensation and motion, gradually deepening into insensibility.

Here we see that the basic action of strychnine is almost exactly opposite to that of alcohol—it is a tonic and stimulant, as opposed to an anesthetic and paralyzant.

One of its most characteristic actions is seen in the treatment of chronic alcoholism.



The system of the inebriate is relaxed in every part, paralyzed in greater or less degree, unable to carry on its functions properly. Mentally and physically he is dull, nerveless, incapable. His mind is dulled and his moral sense is weakened. It is in overcoming such a condition as this that strychnine has its proper field of action. Its use revivifies the tissues, makes the mind act more clearly, raises the man out of his soddiness and indifference and causes the feeling of depression and inability to give way to one of lightness and elasticity. Under these circumstances the craving for alcohol disappears, as the natural result of the antagonistic action of the strychnine.

J. M. FRENCH, M.D.

Milford, Mass.

### The Animal Husband

YESTERDAY there came into my office a married woman about forty-three years old. Her husband is vigorous and virile, has a good job and makes a good living, for people in their station in life.

This woman has borne this man one living child and has had several miscarriages. About eight months ago they had the misfortune to lose a child at birth, after a very difficult labor, which left the mother in a greatly weakened condition, from which she has not fully recovered. Her menstruation is beginning to be irregular, with the approach of the menopause. There is a lessening of sexual pleasure, as is natural at this time of life. The husband is greatly displeased that she can not reciprocate as in bygone days, and is finding more joy and interest away from home. His wife says he never gives her a caress or a single loving attention, upon which a woman's life and happiness must thrive, but, to use her expression, approaches her as the rooster does the hen.

She has moderate uterine congestion and tenderness, which makes coitus painful and leaves her nervous and distressed, in mind and body. She longs for kindness and some of the little folderols that all women want, to make themselves neat and attractive. Above all things she wants to hold her own husband who, she feels, is drifting away from her. She is a good house-keeper and keeps her person clean and as attractive as she can under the circumstances. She fears

him, in a way, and is averse to having anyone approach him on the subject, fearing greater unhappiness and, knowing the man as I do, I think she is right in this opinion. She wants help so that she can retain her hold on her husband.

The first thought one would have would be to tell her to leave him and forget him. This may have to come; but it brings about a social upheaval that all sensitive people dread and wish to avoid. She says she is willing to do anything or submit to anything to become able to hold the man of her heart, the father of her child. I have some things in mind and will endeavor to carry out a course of treatment which may help her; however, I do not have much confidence in any plan that does not have the full cooperation of all concerned.

W. W. SHAFER, M.D.

Haines City, Fla.

[This communication raises one of the most serious and difficult questions with which we as medical men are confronted: The problem of the purely animal husband who treats his wife in about the way in which one would expect a vigorous gorilla to treat his mate. If the wife happens also to be in the gorilla state of evolution, the results are not especially serious, but if a woman of a higher type marries a man like that, nothing but disaster can result.

One of the most curious things about such a situation is that very frequently these women want to hold on to their husbands. Why they should do so is a mystery.

If the man has any really human emotions which can be appealed to, one might be able to talk to him straight from the shoulder and without any verbal gloves, taking care not to let him know that his wife had made any complaint and basing one's remarks purely upon the physical condition found on examining her. If this cannot be done, or if he will not cooperate, there seems to be no salvation for the poor woman except to leave him.

We have long felt that most marriages which go upon the rocks, do so because of the ignorance, ineptitude or selfishness (or all three) of the husband. This is a rather exaggerated case in point.

A man who has any real love (as distinguished from purely animal desire) for a woman, and any knowledge of the technic of the love-life, should be able to conduct

himself so that sex relations will be highly satisfactory, to his wife as well as to himself, until a rather advanced age. But selfish indulgence on the husband's part will almost inevitably bring the wife to the state of frigidity, if not to active distaste or positive loathing.

Every physician should have some knowledge of the principles of erotology and should avail himself of every opportunity to instruct young husbands and those about to be married in the principles of that art. In such instruction of the young lies the greatest hope for improvement in marital conditions. Middle-aged men, like the one described by Dr. Shafer, are about as hopeless to educate as is an old orang-outan, and one can only pity the women who have fallen into their clutches.

The only possible hope of amelioration of this disastrous situation might be found in a moderately long separation. If this wife could go away on a visit for from three to six months, she would have an opportunity to regain her physical health, and her husband might come to appreciate her better in her absence. It would also give her a chance to *write* some things to him—some plain truths, lovingly stated—which she might not feel free to *tell* him, face to face.

This subject is of such wide and vital importance that we shall welcome a free discussion upon it by our readers, especially by those who feel that they have discovered a workable solution to the problem here presented.—Ed.]

### Biologic Reactions of Radium\*

**L**IVING cells, exposed to radium rays in sufficient amounts, disintegrate and die (necrosis). Pathologic cells require for their destruction less radiation than normal cells of the same type. Susceptibility to radium varies greatly, from the sensitive lymphatic and sex cells, to the very resistant bone and nerve tissues.

Though all pathologic cells seem to be more susceptible than the normal tissues, there is a wide variation in reaction between the structures of the sensitive lymphosarcoma and those of mixed-cell tumors, on the one hand, and resistant bone and neurogenic sarcomas on the other.

\*Notes taken from "Radium in General Practice," by A. J. Larkin, M.D., Chicago. (Paul B. Hoeber, New York).

Radium emits alpha, beta and gamma rays. The two latter are the effective rays in malignant disease; the intensity and amount of the rays are regulated by absorbing screens and other details of technic.

Leukocytosis does not appear to have any part in the therapy of cutaneous cancer.

[It has been reported that patients, who have been irradiated with radium or x-rays, do show an increase in the leukocytes. What part, if any, this leukocytosis plays in the effects produced is yet to be demonstrated.—Ed.]

### A Benediction Upon Graduating Nurses

**M**Y BENEDICTION upon you is a wish that you may understand this world we share.

That you may understand your own selves,

That you may understand your fellow man.

That you may ever command a steady hand, a healing heart, a perfect sympathy, a ready mind, a soulful voice.

That you may continue to be something all finest women are.

That you, at all times, may deserve the confidence of the noblest men and women, called to die.

That you may be good enough to speak the last word some human ear will hear.

That you may ever keep an open door to large ideas.

That your patience may flow like a fountain and your hearts be above grievance toward sick or well.

That you may know what you need to know when you need to know it, and ever illustrate soundness of body and mind.

That you may always impart courage and quiet.

That you may be enfolded by the spirit of the Christ and forget yourselves.

That you may be able to speed back to useful life such as have been interrupted, or speed to the sky such as have had their day; and that you may come to be all that you desire to be before our Maker.

This, all this, is our benediction, and may God bless you every one.

REV. S. W. CHIDESTER.

### Congenital Visceral Extrusion (More Case Reports)

WHILE reading CLINICAL MEDICINE AND SURGERY (Jan., 1930, p. 64) I came across Dr. M. E. Bovee's article on "Congenital Visceral Extrusion." I, too, had a case similar to his, but with different results.

In May, 1928, as a surgeon in consultation with Dr. A. G. Bacoates, in Tulsa, Okla., I saw a baby boy who had been born of an apparently healthy mother the day before. The baby was of normal size (seven pounds in weight) and otherwise normal, except that his abdominal viscera were protruding from an opening, reaching from the ensiform to the symphysis pubis. The intestines and a very large liver—in fact the entire abdominal contents—were out of the body cavity and covered by a pale "scum," which corresponded to what would be the peritoneum.

I advised an operation and, on the seventh day after birth, the margins of the opening were cut away, down to healthy tissue, and the opening closed over the viscera.

The sutures, of kangaroo tendon, did not hold and the abdomen opened on the fourth day after the operation, but, on account of the weakened condition of the patient, another operation was not advisable, so I partially anesthetized him and closed the wound with adhesive strapping. The wound healed with little suppuration, leaving a ventral hernia.

The patient was syphilitic and, under antiluetic treatment, the liver decreased in size and he improved. He is now living, walking and doing well, and is still taking antisyphilitic treatments.

E. E. BOWSER, A.B., M.D.,  
Tulsa, Okla.

I wish to report a case of congenital vis-

ceral extrusion, similar to that reported by Dr. Bovee, in CLIN. MED. AND SURG., Jan., 1930, p. 64.

The mother of this child was 35 years old, of Russian parentage, and had had four children previously, three of whom were normal and the other (the third child) was delivered at seven months and died. It was pot-bellied and the skin had a wrinkled and senile appearance. There was no history of syphilis in either parent and the family history was good.

The infant in question was born in June, 1927, and was a full-term child, weighing about eight pounds and appearing well-developed and normal in every way, except that the muscles and skin of the anterior abdominal wall were missing, leaving the viscera exposed. The heart continued to beat for several minutes after the umbilical cord was severed.

G. P. GIBNER, M.D.

Spearman, Texas.

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(Continued from p. 213)

is carrying a heavy burden of therapy, and any changes in treatment should be made to meet indications such as erythema, desquamation and consequent discomfort from irritation.

Finally, it may be stated that, until we are given some simple specific for internal use, whether peroral or parenteral, combined with simple, rational hygiene of the skin—a *sine qua non*—we must rely upon roentgen-ray irradiation, in selected cases, of course, to produce the desired results.

Relapses are not uncommon, because it must be recalled that effects or symptoms, and not causes, are treated, but these relapses can usually be managed. Results are, as a rule, satisfactory, especially to the patient, and this, after all, is the desirable object in any therapy of a cosmetic nature.

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### PHYSICIANS AND PREVENTIVE MEDICINE

*We are going to be held responsible for the preventive medicine of the future, whether we wish or not; and if the medical profession doesn't take the leadership, it has no cause of complaint if the public organizes other services apart from the medical profession.*—DR. H. EMERSON, New York, in West Virginia M. J., Oct., 1929.

# THE LEISURE HOUR

## The Turtle\*

**S**Ocially speaking, the turtle is a wonderful bird, though scientifically he (including she) is classified as a Chelonian. Hence, the classification of the railway conductor, who dogmatically declared, "Dogs is dogs, but turtles is insects," we regard as arbitrary and indefensible, so far as the turtle is concerned.

The heart of the turtle has been known to beat for twenty-four hours after every drop of blood has been drained from his (including her) body, and after every cent in his possession has been paid out in special assessments.

Turtles are of two sexes, male and female, but, as both sexes, when approached by man, conceal their ears, it is impossible to tell which is which. Yet, if any one has the good luck to see a turtle laying eggs in the sand, the presumption is that the individual under observation is a female. Such egg-laying observation confirms our contention that the turtle is really a bird. After laying eggs, the supposed female turtle flaps hot sand over them with her flappers, kindly provided for this purpose by an all-wise Creator. Hot sand is provided turtles by enterprising Los Angeles contractors, who have saved it up during such memorable summers as that of 1929.

After a certain number of days (including weeks) the hot sand hatches out young turtles, which know their onions so well that they head for the water instead of for the farm, thus avoiding mortgages, poor crops and speculators. But, as soon as the young turtles reach the water, they are, for the most part gobbled up by predatory fish, which have studied the obstetrical calendar so well as to know just when to expect the advent of the new crop. Some of them, however, manage to escape the fish, just how we are not informed, and

grow up to be old turtles. After they get to be old turtles they keep right on getting older and finally outlive the oldest inhabitant.

Turtles toil not, neither do they noticeably spin. What they actually do for a living has never been satisfactorily explained; nevertheless, it is conceded that they do it admirably.

Their slogan is "never say die" and candor compels us to admit that they live up to it. Methusalah was an artist in living, but he never saw the day when he could compete with the turtle.

Turtles are immune to typhoid fever and never become carriers of this disease, so far as known, hence the wisdom of the late Ward McAllister who, years ago, advised New York millionaires to live on terrapin.

Medical science should provide a turtle serum for old men, in order that they may out-thusalah Methusalah. In default of turtle serum, our advice, dispensed gratis and in the interest of humanity, is to study the ways of this wonderful bird and follow them carefully.

Practical difficulties make it impossible for us to ascertain with exactness the blood pressure of turtles, but we have reason to believe that it is normal, possibly subnormal, for centuries at a time. Reasoning from this, we should provide ourselves with a shell into which we can retire, whenever anybody urges us to "do something," since the latest theory of increased blood pressure is that it is chiefly found in those who do too much.

The turtle, moreover, is a diurnal bird. He (including she) is active, relatively speaking, in the day time only, hence never "burns the candle at both ends." Indeed we are informed, on authority we deem reliable, though we do not really know it as a fact, that a turtle would not even recog-

\*Reprinted from *Phi Alpha Gamma Quarterly*, Vol. xxviii, No. 3, October, 1929.

nize a candle as such, if he (including she) saw one. Such being the case, turtles do not need nor have to heed the advice of the late Bert Williams regarding "late hours."

Turtles are superior to parrots: for, although they have a beak like that of a parrot, they never talk "too damn much" and, although the parrot, in spite of loquacity, lives a good long time, it is not at all in the same class with the turtle, when it comes to longevity. This goes to show that talking does not really pay in the long run.

In fact, all things considered, we should thank heaven for the turtle. The reason why we have turtles is because "we need them in our business," as an example. Many a man would have been alive today if he had only been a turtle, and the more any man (including women) can resemble a turtle the longer his life expectancy.

CLIFFORD MITCHELL, M.D.

Chicago, Ill.

### Sickly Ideas

Beware not to lose your enthusiasm. Do not look backward. Progress with your age. Be *hospital* to new ideas. — Dr. Maurice H. Harris, in *Union Mutual Messenger*.

### The Proper Audience

Professor: "I am going to speak on liars today. How many of you have read the twenty-fifth chapter of the text?"

Nearly every student raised his hand.

Professor: "Good! You are the very group to whom I wish to speak. There is no twenty-fifth chapter."—*Union Mutual Messenger*.

If fairies lived and one should come to me  
And say, "Ask what thou wilt, I'll grant  
it thee,"

Think you I'd crave the boon sought by  
my brothers,

To see myself as I am seen by others?

Ah no, this would I ask the gentle elf,

That others see me as I see myself.

—B. A. HEYDRICK.

In *Harper's Weekly*,  
about 1892.

### A Cause for Melancholia

"What's the matter, old man?" he said as they met the next morning after. "You look blue."

"I feel blue."

"But last night you were the jolliest member of our party."

"I felt jolly."

"You acted like a boy just out of school."

"I felt like one."

"You said that your wife had gone away for the first time in three years, and there wasn't anyone to say a word if you went home and kicked over the mantel clock."

"I remember it."

"You said that if you stayed out until four o'clock there was no one to look at you reproachfully, and sigh, and make you feel mean."

"Yes, and I stayed out until four o'clock, didn't I?"

"You certainly did."

"And I gave a war-whoop on the front door-step."

"Yes, and you sang a verse from a comic opera song, and tried to dance a clog."

"Yes, and my wife missed that train! Now, please go away and let me alone."

### Scientist and Philosopher

A scientist is a man who knows a great deal about a few things, and who keeps on knowing more and more about less and less, until he knows everything about nothing.

A philosopher is one who knows a little about a great many things, and who keeps on knowing less and less about more and more, until he knows nothing about everything.

### Paw Sez

Maw sez this terrible crime situation  
Is Threatenin' the very life of the nation;  
It's got to be met with promptness and de-  
cision

And only the most drastic measure will  
suffice.

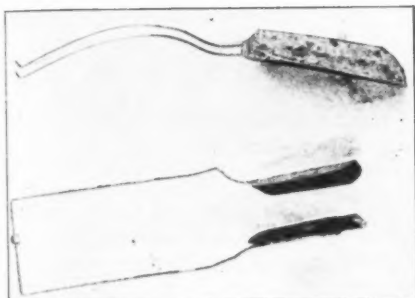
And Paw sez, yes, but it wouldn't be nice  
To take any action without the advice

Of Mr. Hoover's commission.

—B.H.



# Thumbnail Therapeutics



## "Banjo Splint" for Finger Injuries

A "banjo splint" for the fingers (one or more) is shown in the accompanying illustration. These can be readily made to suit an individual case by soldering a piece of bent wire to some bits of sheet iron. The splint can be secured to the forearm by adhesive strapping.—DR. H. A. THOMPSON, Raleigh, N. C., in *Am. J. Surg.*, Apr., 1929.

## Viosterol in Acrodynia

In a case of acrodynia in a child of 2 years, the prompt favorable response to yeast and irradiated ergosterol (half a yeast cake and 5 drops of viosterol daily) suggests that this is a vitamin-deficiency disease, rather than an infection.—DR. S. J. McCLENDON, San Diego, in *J.A.M.A.*, Aug. 10, 1929.

## Removing Hairpins from Bladder

An ordinary curved forceps, such as a Mikulicz clamp, can be used for extracting hairpins from the female bladder.

The forceps is advanced gently through the urethra into the bladder. By palpation with the left index finger in the vagina the position of the hairpin can be determined and it is then seized in the middle and pulled toward the urethral orifice. Under control of the palpating finger the

closed end of the hairpin can be felt and the forceps is gradually worked along to this end, when the hairpin can be easily extracted.—DR. A. FRENDBERG, Berlin, in *Urol. and Cutan Rev.*, March, 1928.

## Thyroid Extract

Progressive loss of body weight, as a result of administration of thyroid extract, is, as a rule, a toxic effect. Its use as an aid in reducing weight, in patients with normal thyroid function is, therefore, illogical, and either inefficient or dangerous.—DR. L. M. WARFIELD, *Ann. Intern. Med.*, Nov., 1928.

## Liver Therapy in Normal Persons

A large number of blood examinations were made and four healthy persons were treated with both fresh liver and liver extract, with the result that the percentage of hemoglobin and the number of red cells remained constant.—DR. B. S. CORNELL, Montreal, in *Canad. M.A.J.*, April, 1928.

[Liver feeding has no particular effect upon normal persons—which is worth knowing—but it has an effect on those suffering from pernicious anemia.—ED.]

## Correction of Speech Disorders

The treatment of speech disorders, which is now mostly done by pedagogues, is a medical problem which requires the cooperation of the pedagogue, the psychiatrist and the rhinolaryngologist. Teachers should work under the supervision of a medical director.—DR. JOHN A. GLASSBURG, New York, in *J.A.M.A.*, Mar. 23, 1929.

## Chaulmoogra Oil in Leprosy

As a result of the extensive use of the chaulmoogra derivatives during the last six years, in the Culion Leper Colony, 589 "negatives" have been paroled or dis-

charged, against only 47 cases for the previous 15 years. Taking all results into consideration, about 16 percent apparent cures\* have been obtained in a large group of lepers, mostly advanced, bacteriologically-positive cases, under treatment for from the past 6 months to 6 years.—DR. C. B. LARA, in *J. Philippine Islands Med. Assn.*, June, 1928.

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### Calcium Chloride in Epididymitis

Relief from pain and tenderness, in epididymitis, generally follows intravenous injections of 0.5 to 1.0 Gm. of calcium chloride in dilute solution. Daily injections, to the number of 4 or 5, should be given, to avoid recurrence. Disability is greatly lessened.—DR. E. RUPEL, in *Am. J. Med. Sc.*, September, 1928.

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### Insulin and Suprarenal Insufficiency

There seems to be sufficient evidence to indicate that persons suffering from suprarenal insufficiency may show severe or fatal reactions after very small doses of insulin. Where this condition is suspected, it would be wise to precede the injection of insulin by an injection of epinephrin.—DR. C. A. MILLS, in *China Med. Journ.*

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### Acquired Visceroptosis

The treatment of acquired visceroptosis requires in the main, support to the abdominal wall by a suitable belt, or to the pelvic girdle by means of a brace, combined with remedial exercises directed to the recovery of tone in the muscles of the abdominal wall and perineum. Displacement or deformity may have been produced in viscera, such as the uterus or kidney or in segments of the gut itself, which if isolated can be corrected by operative means.—DR. F. D. SANDER, in *Practitioner*, May, 1928.

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### Ovarian Follicular Hormone and Sterility

Following injections of ovarian follicular hormone, 5 out of 12 sterile women who were potential mothers became pregnant. All other possible causes of sterility than absence of ovarian hormone could be ruled out.

Women with normal menstruation but

who were sexually frigid and sterile were relieved.—DR. JOHN C. HIRST, Philadelphia, in *Am. J. Obst. and Gynec.*, April, 1928.

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### Delayed Coitus and Sterility

In 2 cases, both Jewesses, who observed the old custom of waiting two weeks after the menstrual flow before resuming coitus, the women were sterile without any demonstrable cause. Advice to reduce the period of abstinence to one week resulted in pregnancy in each case.—DR. R. KURZROK, in *Am. J. Obst. and Gynec.*, April, 1928.

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### Ephedrine

Ephedrine, ingested or applied locally, in bronchial asthma and hay-fever, is highly regarded by those who have given it an extended trial. In my experience in both hospital and private practice it is a drug of the greatest value.—DR. A. H. W. CAULFIELD, of Toronto, in *Canad. M.A.J.*, May, 1929.

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### Synovitis

A synovitis of the left knee disappeared on the application of a back splint to restrain movement, the drinking of large quantities of water, and a vegetable diet. DR. G. A. STEPHENS, London, in the *Prescriber*, June, 1929.

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### Sanocrysin in Pulmonary Tuberculosis

A very careful and systematic comparison of a group of pulmonary tuberculosis patients treated by sanocrysin, with a clinically similar group not treated by sanocrysin but otherwise under similar conditions, pointed to the conclusion that the sanocrysin-treated cases do better than untreated cases.—DRS. B. R. CLARKE and H. G. K. HADDICK, in *Lancet* (London), April 6, 1929.

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### Dementia Precox and the Endocrines

A very intensive study of eunuchs, dementia precox patients and schizophrenics, indicates that dementia precox is primarily an endocrinopathy in which the gonads are consistently degenerated or hypofunction-

ing. Sexual activity and fecundity are no adequate criteria of gonad incretion, but rather the state of the interstitial lipoid should be taken as the criterion of normality. Supplying of the endocrine deficiency should assist in the social adjustment of the victims of dementia precox.—DR. JAS. L. MCCARTNEY, in *Endocrinology*, Jan.-Feb., 1929.

### Green Vegetables and Red Blood

Green vegetables are needed to make red blood. Witout them, even a diet rich in vitamins A and B will not prevent the occurrence of anemia.—DR. ZIH, Debrecen, Hungary, before International Physiological Congress, Boston.

### Scalp Troubles

Euresol (acetoresorcinol) is very valuable for itching scalp, dandruff and falling hair. The following formula works admirably:

Euresol .....	8
Oleum ricini .....	2
Alcohol .....	100
Spirit myriciae .....	100

—DR. JAS. SKEBELSKY, Chicago, in *Illinois M.J.*, Jan., 1929.

### Ultraviolet Irradiation in Dentistry

Local ultraviolet irradiation, from a water-cooled, mercury quartz lamp, has a wealth of possibilities in oral affections. The beneficial effects of such irradiation are due to the utilization of the middle and far ultraviolet region rays. The action of the rays is photochemical, bactericidal and cytotoxic and such effect is due to absorption of energy by the tissue and not to penetration.—S. WOLLENBERGER, D.D.S., Chicago, in *Arch. Phys. Therap., X-Ray, Radium*, July, 1929.

### Segregating Treatment of Respiratory Tract Diseases

More individuals suffer from some form of acute or chronic upper respiratory disease than from any other single ailment, and the prevalence of upper respiratory tract disease (including that of the tonsils), coupled with the necessity for exact specialized knowledge of the anatomy, pathology and physiology of the structures in-

volved, would seem to warrant the segregation of this type of work within every hospital and its control by suitably trained staff members.—DR. S. R. BOYCE, Madison, in *Wisconsin M. J.*, July, 1929.

### Efficacy of Calcium Therapy

Regarding an impression that calcium therapy, in conditions showing a normal blood calcium level, would probably be of little value, certain experimental work has shown that dogs fed on a calcium-deficient diet had a normal blood calcium level but were particularly sensitive to carbon tetrachloride, while large quantities of this salt could be taken by normal dogs with impunity.

Not alone the blood calcium level, but the hydrogen ion concentration, phosphate and calcium protein compounds must be taken into account when considering blood calcium physiology; and a normal blood calcium level does not in any way justify the idea that calcium therapy will be of no value. DR. PAUL D. LAMSON, in *J.A.M.A.*, April 6, 1929.

### Sodium Thiosulphate in Mercury Poisoning

In 5 cases of bichloride of mercury poisoning, the symptoms cleared up under sodium thiosulphate treatment.

On account of its low toxicity, this drug is valuable, as it may be administered in large doses by the mouth, intravenously or as an enema. One ounce of ten-percent solution may be given, intravenously, three times daily, and one or two ounces of the same solution by mouth every 2 or 3 hours for five or six times, and then at less frequent intervals. Bowel and kidney lesions clear up rapidly under sodium thiosulphate treatment.—DRS. T. E. McMURRAY and G. G. GIBSON, Wilkesburg, Pa., in *M. J. and Record*, May 1, 1929.

### Optimum Concentration of Dextrose Solutions

As the result of experimental investigation, it has been found that concentrations of dextrose solutions between 3.5 and 6 percent produced no observable changes in the erythrocytes. From the experiments it is concluded that a 5 percent aqueous solu-

tion of dextrose is the optimum concentration and that strengths below 3.5 and above 6 percent are harmful to the blood.—DRS. J. D. WILLEMS and R. W. McNEALY, in *Northwest Med.*, July, 1929.

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### Liver Extract in Arsphenamine Dermatitis

Intramuscular injections of a sterile, aqueous liver extract—three weekly doses of 5 to 10 cc. each—were found to cause noteworthy improvement in cases of salvarsan (arsphenamine) dermatitis.—DR. B. SPIETHOFF, in *Münch. med. Wchnschr.*, April 5, 1929.

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### Emotions and Hypertension

In cases of hypertension not due to organic disease, the chief aim in treatment should be to allay the patient's fears and smooth out the "peaks" of his emotional and mental life.—DR. DANA W. ATCHLEY, New York City.

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### The Electro-Cautery in Stomatology

Certain French stomatologists have recommended the use of the diathermy knife in oral operations, as having many advantages over the scalpel and the ordinary thermocautery. Such operations as gingivectomy, the cutting of the mucosa over wisdom teeth, etc., can be performed bloodlessly and in full view. There is no injury to the bony structures.—*Le Siècle Dentaire*, Paris, Aug. 1, 1929.

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### Vitamin B in Infancy

A series of 4 premature infants were fed vitamin B daily, in the form of brewer's yeast, and their average daily rate of gain in weight was over 79 percent greater than that of other premature infants admitted to hospital.

A series of 30 infants were fed vitamin B daily, in the form of brewer's yeast, and their average daily rate of gain was over 100 percent greater than that of other infants admitted to hospital.

The amount of yeast fed varied with the weight of the children. One part by volume of the dried brewer's yeast was mixed with two parts of water and this mixture was given in the following amounts, twice daily; 1 cc. to infants weighing up to 4 pounds; 2 cc. to those weighing from 4 to 8 pounds; 4 cc. to those from 8 to 12 pounds; and 8 cc. to those from 12 to 25 pounds.—DR. A. P. BLOXSOM, of Nashville, Tenn., in *Am. J. Dis. Child.*, June, 1929.

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### Camphor in Engorgements of the Breast

In 68 of 80 lactating mothers with engorged breasts, relief was obtained by intramuscular injections of camphor in oil; 1½ grains (100 mgm.) to a single dose. The first day two injections were given, and one daily injection the three following days. DR. N. W. PHILPOTT, of Montreal, in *Canad. M.A.J.*, May, 1929.

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### Peptic Ulcer Treated by Milk Injections

Ten patients with peptic ulcer—gastric, duodenal and jejunal—who did not respond to the usual dietary and alkaline treatment, were promptly and markedly relieved by the injection of milk protein. Usually injections of 10 cc. were given, at intervals of 4 days.—DR. MARKS S. SHAINÉ, New York, in *M. J. and Record*, July 3, 1929.

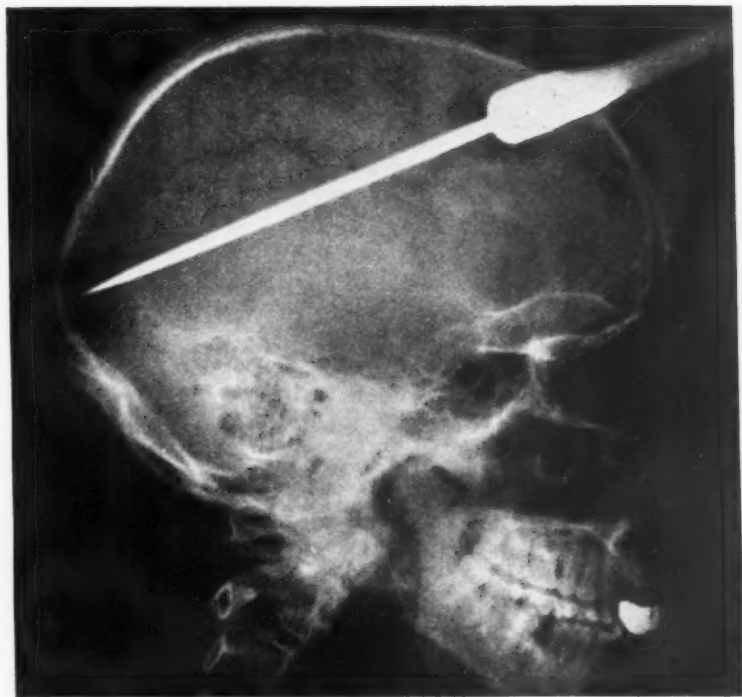
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### Carbon Dioxide Inhalation in Morphine Poisoning

A young baby received an overdose of morphine and was cyanotic, with scarcely perceptible respiration. It recovered completely on treatment with inhalations of a mixture of 10 percent carbon dioxide and 90 percent oxygen, in an ordinary oxygen cylinder with the scollated wash bottle and tubing outfit for relief of respiratory failure. The carbon dioxide-oxygen inhalations were kept up for about 16 hours.—DR. J. R. McCURDY, Pittsburgh, in *J.A.M.A.*, June 8, 1929.

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## Current Medical Literature



*Courtesy of Victor X-Ray Corporation.*

Fig. 1.—Roentgenogram, of skull, with ice-pick in place.

### Unusual Brain Injury

Laymen, and even physicians, are often surprised at the extensive injuries which certain areas of the brain can sustain, without resulting death or serious disability.

Dr. Ray B. Essick, of Murphysboro, Ill., reports, in *Victor News* for Jan. 1, 1930, the case of a man who suffered a fracture of the skull in 1927, in treating which a piece of the anterior part of the left parietal bone, about  $1\frac{1}{2}$  inches in diameter, was removed.

After a stormy convalescence, the patient recovered and returned to his home, but showed mental changes. He was irritable and erratic, which he had not previously been.

Recently, in a fit of temper over imaginary wrongs, he plunged an ice pick, up to the handle, through the skull defect and into his brain. He was taken to the hospital where the accompanying picture (Fig. 1) was made, after

which the pick was removed without an anesthetic.

Following this experience his delusions of persecution were more marked, so that he was sent to an institution for the insane, from which he was later discharged. He is now working as a laborer on a truck farm.

### Avoiding Colds by Proper Dressing

In discussing deaths from pneumonia and the causes that lead up to it, Dr. E. Harrison Griffin, of New York, in *M. J. and Record*, Jan. 15, 1930, expresses the opinion that the most important factor is improper clothing, especially clothing which prevents proper ventilation of the skin.

What must happen to our skin if we stop all ventilation by heavy woolen garments, allow



ourselves to trudge through life with our skin like a Turkish bath, subject at all times to draughts, and then wonder why we catch cold and why pneumonia and phthisis play such a prominent part in the last role we enact—the victim of death!

To dress properly can be sifted down to a very few words: Clothe oneself with enough to prevent perspiration, even under exertion and in the coldest winter. Don't dress for the really few very cold days and perspire and sweat through the rest of the time. Strike a happy medium. Don't varnish the skin with heavy clothes. Sleep on a thick mattress (or better two) so that the under part of the body is warm. Cotton stockings or those of silk, rather than of wool, will keep the feet dry, which means warmth and circulation, the twin sister to health.

### Etiology of Influenza

A summary of a report by Dr. I. S. Falk and associates on the etiology of influenza, following an investigation in the Department of Hygiene and Bacteriology of the University of Chicago, appears in the *J.A.M.A.*, Dec. 28, 1929.

From many hundreds of cultures, isolated from human and monkey sources, eight morphologic and cultural groups appeared, but the authors suggest that only two may be of etiologic significance in influenza. These were: (1) Highly pleomorphic, green-producing streptococci, which vary in their gram-staining and fermentative properties and are not found normally in the sources from which they are cultured; (2) non-pleomorphic, gram-positive, relatively large, green-producing diplococci.

From the evidence at disposal, the authors think it not improbable that the pleomorphic streptococci were etiologically related to the influenza outbreak of the winter of 1928-1929.

### Nasal Catarrh

In *Eye, Ear, Nose and Throat Monthly*, Oct., 1929, Dr. Dan McKenzie, London, Eng., discussing the causes of nasal catarrh, remarks that chronic nasal sepsis induces hypertrophy of the nasopharyngeal tonsil and that adenoids are merely incidents in the course of chronic rhinitis.

Dr. McKenzie leans to the view that chilling of the body surface is one of the causes of acute nasal catarrh—the "common cold." The procedure is not, however, direct. A susceptible person or child a sufferer from a low grade latent infection—often chronic nasal catarrh—develops acute catarrh spontaneously and proceeds to infect his healthy neighbors; exposure, fatigue and malnutrition, favor the onset of the disease. In those with the latent infection, a wetting, exposure to cold or a draft is sufficient to push them over the edge and cause the onset of spontaneous acute catarrh.

A course of vaccines twice a year, in susceptible people, is a simple, harmless procedure which, every now and then, is followed by a prolonged intermission.

Dr. McKenzie thinks that there is no practical method of preventing contagious coryza. All

we can do is to remove, when possible, all local sources of sepsis and irritation, and build up and maintain a high resistance against the coryza-producing virus, whatever it may be.

### The Wassermann Reaction in Syphilis

In *Le Monde Méd.* of Paris, Sept. 1, 1929, Drs. J. Nicolas and J. Gate point to recent statements in the literature that the Wassermann reaction is an independent symptom, a manifestation of the same value as the syphilitic rash, the gumma, etc. Eliciting this reaction is not equivalent to the demonstration of syphilis, but to try and make evident one manifestation of this infection. If it is positive, the Wassermann reaction is just one argument in favor of the presence of the treponema, but nothing more. If it is negative, we are never authorized to exclude syphilis; nor can the variations of the reaction during treatment guide it absolutely. Too many syphilologists pay regard to the Wassermann reaction alone. Measuring syphilis by this or any other serologic reaction is a biologic and clinical error.

A negative serologic reaction signifies nothing, either for diagnosis or treatment. A positive reaction is a sign in favor of syphilis, but only on one of the two following conditions: Either that it supports one or more clinical signs; or, if isolated, that it should be remarkable by its tenacity and that it has not its origin in one of the diseases known to be susceptible of giving a positive serologic reaction.

### Puerperal Infections

Dr. F. N. Reynolds, of London, Eng., in *Practitioner*, Oct., 1929, asserts that, when a uterine infection is definitely recognized, intrauterine treatment should be the first consideration, despite the prevalent general opinion to the contrary.

The intrauterine procedure is summarized as follows:

- 1.—Exploration, and evacuation of any contents;
- 2.—Medication.

The anesthetized patient is placed in the full lithotomy position and the vulva painted with iodine. Vulva, vagina and perineum are inspected; if stitches have been used and are unhealthy looking they should be removed; a warm, antiseptic vaginal douche is given; the anterior lip of cervix is pulled down with a vulsellum forceps and the entire cervix and cervical canal painted with iodine; swabs are very carefully taken from the interior of the uterus for culture. The next step is to empty the uterus of any contents, the os being dilated if necessary. Then the cavity is washed out with a mild antiseptic solution, using an ordinary metal douche nozzle and making no attempt to clean with a curette.

A rubber tube of sufficient size to allow a rubber catheter to pass through it is introduced as far as the fundus and is stitched to the cervix.

The catheter, attached to a 20 cc. syringe filled with a warm 2-percent solution of iodine in glycerin, is passed through the tube as far as it will go into the uterine cavity and the solution slowly injected. The cervix is then allowed to recede but the tube is retained in place for subsequent injections, which are given daily, always preceded by a warm douche. The tube will drop out after 4 or 5 days and the douche alone is then continued.

The author gives also 50 to 100 cc. of puerperal antistreptococcal serum, subcutaneously (or intravenously in a severe case), as the initial dose, followed by 50 cc. daily until acute symptoms have passed, generally in seven or eight days.

The general treatment is the same as for any other pyogenic infection.

Such a treatment, the author claims, if given early, will carry the large majority of cases of puerperal infection to a successful conclusion.

### Calcium Gluconate

As pointed out by S. A. Szurek, in *Proc. Soc. Exper. Biol. and Med.*, June, 1929, calcium therapy has been hindered by the disagreeable effects usually following the ingestion or injection of nearly all calcium salts.

The recent introduction of a new calcium preparation—calcium gluconate—almost entirely obviates local and systemic unpleasant reactions. This salt has been used in the treatment of bronchial asthma, spasmodophilia and a number of other conditions.

A test of the value of calcium gluconate in preserving the lives of completely parathyroidectomized dogs is reported by the above investigator. The average survival of such treated animals was from 3 to 5 days, and the author concludes that calcium gluconate is as effective as calcium lactate for the purpose; but it was observed also that the gluconate seemed to have a greater tendency to produce diarrhea than has the lactate.

The non-irritating and non-inflammatory effects of the gluconate, when injected subcutaneously or intramuscularly, were confirmed.

### Treatment of Gonorrhea During Pregnancy

There appears to be a widespread feeling that treatment of gonorrhea during pregnancy may cause interruption of the pregnancy by abortion or premature labor. In *J. Urol.*, Oct., 1929, Drs. J. B. Bernstine and T. L. Montgomery, of the Dept. of Obstetrics, Jefferson Med. Coll. Hosp., Philadelphia, report that 40 pregnant patients were treated for gonorrhea. The average duration of pregnancy, at the beginning of the treatment, was  $7\frac{1}{2}$  lunar months. Fourteen (14) of the women were primigravidae. In 7 cases the gonorrhea was acute, all of these patients being primigravids.

Duration of treatment varied from 1 to 5 months, depending on the period of pregnancy and the persistence of the disease.

In acute cases rest, cleansing and antiseptic douches and local applications were used.

In chronic cases home and clinic measures were employed. The home treatment consisted of a daily vaginal douche of one teaspoonful of Lugol's solution in 2 quarts of warm, boiled water, and at night the insertion of a vaginal suppository consisting of 2-percent mercurochrome in a coco-butter base. When the patient comes to the clinic, the cervix is exposed with a vaginal speculum, the discharge is wiped away and a cotton applicator, saturated with 5-percent mercurochrome, is placed in the cervical canal and left in situ for a few minutes. The vagina is then painted with the mercurochrome solution and argyrol is instilled into the urethra.

In 29 cases, a definite improvement was noted in the patient's symptoms and in the condition of the birth canal. In 4 cases the improvement was slight and in 6 cases none. In no case was abortion or miscarriage induced; 39 were delivered at full term, and in the one premature delivery, the treatment could not be blamed.

In 1 case, gonorrheal ophthalmia of the newborn developed, but this was in a case in which the mother had only one treatment before labor.

### Liver Extract in Secondary Anemia

In *Med. Herald and Physiotherap.*, Oct., 1929, Dr. L. M. Flewelling, of Glendale, Calif., expresses the opinion that liver feeding is just as potent in severe secondary as in pernicious anemia, and that this has been proved clinically in scores of cases. She mentions a personal case of a woman with a uterine fibroid who, following floodings for several months, was in a very depleted state when she came for treatment—r.b.c., 3,690,000; hemoglobin, 42 percent. The administration of 4.5 Gm. of liver extract daily gave prompt and gratifying results, the blood count soon reacting and maintaining normal limits.

### Treatment of Eclampsia

Drs. O. H. Schwarz and W. J. Dieckmann, of the St. Louis Maternity Hospital, in *Am. J. Obstet. and Gynec.*, Oct., 1929, give this summary of their treatment of eclampsia:

Magnesium sulphate, in 25-percent solution, is given intramuscularly to control convulsions. On admission, the patient receives an injection of 10 cc., and then 5 cc. after each convulsion until controlled. The average amount given has been 19 cc., with a maximum of 50 cc. in only one case. In coma, no magnesium sulphate is given, as it acts, intramuscularly, only as a sedative. If given intravenously it decreases intracranial pressure, but its depressant action on the respiration and heart is so marked that its use is contraindicated.

Much larger doses have been given by others, but the authors attribute their success with the small dose, not only to the control of the convulsions, but to the preventing of their further occurrence by the use of dextrose intravenously.

Believing that absorption from the alimentary tract is an important factor, the authors give a colonic irrigation and, in addition, usually wash out the stomach and leave 60 cc. of a saturated solution of magnesium sulphate in it.

The next and most important procedure is to inject 1000 cc. of a 20-percent dextrose solution intravenously, over a period of 30 to 50 minutes, two, three or even four times daily, depending upon the severity of the case.

Usually, after 24 hours, the stomach will empty itself, as evidenced by failure to recover injected solution; and then 5-percent Karo syrup water is injected, beginning with 50 cc. and increasing hourly up to the patient's tolerance which may be as much as 300 cc. per hour. This is continued until the patient is conscious and able to take the eclampsia diet consisting of fruit and fruit juices.

### Control of Epidemic Impetigo Neonatorum

Epidemic impetigo neonatorum, in a hospital nursery, is a most annoying condition and one very difficult to control.

In *Amer. J. Obstet. and Gynec.*, Sept., 1929, Dr. E. Kellert, of Schenectady, N. Y., states that a method of successfully dealing with it was to anoint the entire body of each infant, after its bath, with a solution consisting of equal parts of glycerin and water. A solution of 50 or 60 percent glycerin inhibits the growth of pyogenic cocci and is not irritating to the skin. In using the sterilized solution, it should be poured from the bottle on cotton and daubed over the skin, nails, scalp, etc. This applies to affected as well as to normal infants.

In the author's hospital nursery service, impetigo epidemics have disappeared since the adoption of this procedure.

### Overdosage of Viosterol

The results of an experimental study on animals by R. F. Light and associates, as given in *J. Biol. Chem.*, Oct., 1929, are as follows:

Excessively large doses of irradiated ergosterol (Viosterol) must be administered daily before any ill effects are noted. Doses as high as 10,000 times the daily curative dose, over a period of six months, have no effect on the growth of white rats and no apparent effect on their body functions.

Excessive amounts of vitamin D cause a drainage of mineral constituents from the body, with a relatively greater elimination of phosphorus than of calcium. Doses of 10,000 times the daily curative dose produce anorexia, emaciation, greasy hair, labored breathing and eventually death.

### Circulatory Failure in Diphtheria

In *Bull. Johns Hopkins Hosp.*, Nov., 1929, Drs. F. F. Schwentker and W. W. Noel report that there were 178 deaths among 1,600 cases of diphtheria admitted to the Sydenham Hospital, Baltimore, between 1920 and 1927. Thirty-nine (39) of these were definite clinical cases of circulatory failure, 48 percent of which occurred at the height of the disease, from the 2nd to the 9th day, and 52 percent during convalescence, between the 9th and 47th day.

Cases of early circulatory failure, according to the authors' researches, are an essential part of the diphtheria intoxication and are to be treated accordingly. The late circulatory failure, however, is a complication of the disease, caused probably by local inflammatory reactions incident to regeneration and repair. The authors will present another report, later on, on the treatment of such circulatory failures.

### Diagnosis of Ectopic Pregnancy

In *Am. J. Obstet. and Gynec.*, Sept., 1929, Dr. T. E. Lavell, of New York City, from a study of 410 cases of ectopic pregnancy observed at the Bellevue Hospital, New York, during the past 17 years, arrives at these conclusions regarding the diagnosis of this condition:

- 1.—In a majority of cases, a preceding period of unusual infertility was not demonstrated.
- 2.—A previous history of severe inflammatory pelvic disease was seldom reported.
- 3.—History of previous pregnancies closely approximates that of the married population of this age group.
- 4.—A large incidence of previous operations on the uterus and adnexae was revealed.
- 5.—Predominant type of abdominal pain is irregular, lancinating or colicky, and subject to remissions.
- 6.—Vaginal bleeding is most frequently irregular and scanty.
- 7.—Actual fainting or its minor manifestations of sudden weakness was present in at least 57 percent of the cases. The symptom is almost pathognomonic and, in relation to the type of abdominal pain and vaginal bleeding, will establish a diagnosis in the largest number of cases.
- 8.—Except in the presence of infection or recent hemorrhage, the temperature, pulse, blood pressure, blood count, and sedimentation time are approximately normal.
- 9.—A closer scrutiny of the alleged last menstruation will often reveal an anomaly which may clarify the diagnosis.
- 10.—More reliance may be placed on the history than on physical examination or laboratory findings.

### Etiology of Inguinal Hernia

In *Surg. Gynec. and Obstet.*, Oct., 1929, Dr. W. W. MacGregor, of Detroit, asserts that the most important etiologic factor in inguinal hernia is an insufficiency of sphincteric action on the part of the muscular ring at the internal opening of the inguinal canal, and that the usually accepted etiologic factors are secondary to this.

The author gives anatomic (dissection), empiric and experimental proofs of the existence of an internal inguinal sphincter, whose main purpose is to protect the internal ring against variations of intra-abdominal pressure. The sphincter is voluntary in character and has a distinct motor nerve supply. When, for any reason, constitutional or other, this sphincter

becomes relaxed, the way is open for the occurrence of an inguinal hernia.

Sphincter atony, according to the author, satisfactorily explains the etiology of the greatest number of cases.

### Restlessness and Insomnia

In *Med. Times.*, Oct., 1929, Dr. E. E. Cornwall, of Brooklyn, gives the following treatment, based on a lessening of mental activity, for restlessness and insomnia.

The attention is concentrated on the maintenance of certain muscular acts, so that the brain cells occupied in thinking, being deprived of the stimulating spotlight of the attention, more easily subside into the quiescence necessary for mental relaxation and sleep.

The muscular acts selected for the purpose of thus distracting the attention from the thinking cells of the brain to the cells controlling muscular action are of a character favorable to muscular relaxation and sleep, and do not disturb the body as a whole, which can remain prone and muscularly relaxed, for the most part, during the performance.

These muscular acts, which are distinct and are performed simultaneously, are four in number, viz.:

Elevation of the corners of the mouth, as in smiling.

Breathing somewhat more slowly and deeply than usual.

Closure of the eyelids.

Elevation of the eyeballs to a slight degree.

These acts are kept up, without intermission, and their performance, being without disturbance of the body as a whole, mental and physical relaxation and sleep can cause their spontaneous cessation without shock.

The *modus operandi* of this treatment is psychologic. It is difficult to keep up the co-ordinated muscular contractions required by the four acts described, simultaneously and continuously, for any length of time, and think of other things.

### Toxemias of Pregnancy

Dr. Reuben L. Larsen, Evanston, Ill., has done some inductive reasoning as to the cause of the toxemias of pregnancy, and sets forth his premises and conclusions in *Am. J. Obst. and Gynec.*, for Sept., 1929.

Briefly, he suggests that these conditions (both hyperemesis gravidarum and eclampsia) are, or may be, due to an imbalance between the mineral salts of the body, resulting from the depletion of the mother's calcium reserve by the growing fetus. This calcium deficiency is most marked in the liver and causes an increase in the permeability of the cell membranes, permitting the liver to pour out into the blood stream, toxic products which do not normally escape, and which give rise to the symptoms of these conditions.

If these ideas are correct, the prophylaxis and treatment of the toxemias of pregnancy rest

upon the administration, to the gravid woman, of sufficient quantities of calcium (preferably the lactate), by mouth, plus enough parathyroid extract to metabolize that salt and make sure of its retention. Treatment with ultraviolet rays may also be helpful.

As this abnormal liver toxin causes the burning of sugar and a consequent hypoalkalinity ("acidosis") of the body fluids, the present method of treating developed cases—with intravenous injections of dextrose solutions and alkalis—is entirely rational.

The use of injections of magnesium sulphate is also logical, for magnesium is compensatory and complementary to calcium, and an excess of its salts in the blood stimulates a mobilization of the body's supply of calcium, which should, of course be replenished by the administration of calcium lactate and parathormone.

### Appendicitis or Obstruction of the Appendix?

In *Practitioner*, Lond., Oct., 1929, Dr. D. P. D. Wilkie points out that two distinct pathologic states are met with in acute disease of the appendix; namely, acute inflammation of the wall (appendicitis) and acute obstruction of the lumen. The first causes an acute illness, which is rarely fatal; the second type is very dangerous and accounts for 90 percent of the mortality from so-called appendicitis.

In the first type it is preferable to operate early, because of the possibility of perforation; in the second type early operation is imperative. This second, dangerous, type is very often treated by the physician merely as a colic, because of the absence of a rising temperature which Murphy considered as one of the cardinal symptoms of appendiceal disease. Thus cases of appendicular disease, in which the need of operation is most pressing, frequently show no rise of temperature during the first eight hours or so; in fact the temperature may not rise until a perforative gangrene, with septic peritonitis, has been established—and then surgery is too late.

It is possible that, at the present time, many cases are being operated upon which would have recovered in any case, while the dangerous and fatal type of case often fails to be recognized during the early stages when surgery is most effective.

### Clinical Diagnosis and Abdominal Disease

In *Practitioner*, Lond., Oct., 1929, Dr. Zachary Cope points out that acute abdominal disease furnishes one of the best examples of the great value of clinical experience in diagnosis. The laboratory has little or no place in the diagnosis of acute appendicitis or the perforation of a duodenal ulcer, the rupture of an ectopic gestation or torsion of an ovarian cyst.

In these days, when the tendency is to belittle the clinical part of diagnosis, it is all the more important that we should stress those

conditions which depend for successful treatment upon early diagnosis, which itself is almost entirely dependent upon a sound clinical knowledge. Prognosis depends as much upon the clinical recognition of early disease in the abdomen as upon anything.

### Actinothrapy in Stomatology

In *Am. J. Stomatol.*, Oct., 1929, Dr. A. T. Rasmussen, of La Crosse, Wis., suggests that there are several definite indications for actinothrapy in dentistry (stomatology). In cases where the patient is suffering from calcium and phosphorus deficiency, the symptoms very frequently appear in the mouth and ultraviolet irradiation plays an important part in correcting metabolism.

In any periodontal or other mouth lesion, in which a lack of calcium can be demonstrated, ultraviolet treatment, both local and general, is indicated; the general treatment because the local condition, whether it be called a periodontoclasia, alveolar osteoclasia or a form of rickets, is due to faulty metabolism and an absorption of calcium from local structures, which can only be stopped by supplying vitamin D through body irradiation.

The bactericidal power of the ultraviolet rays is very marked. Also they have an analgesic effect, and a severe pulpitis may often be relieved by irradiating the affected spot.

Owing to the stimulating effect of the rays, the regeneration of lost tissue and healing of wounds is hastened.

While not taking the place of other valuable means of remedying diseases of the oral cavity, actinothrapy has its rightful place among them.

### Social Aspects of Mental Disease

Dr. W. A. White, of Washington, D. C., in *Arch. Neurol. and Psychiat.*, Nov., 1929, gives results of a study of the social aspects of mental disease in the United States. He shows that insanity is mostly incident in those parts of the country, such as the Eastern Seaboard, from which young and vigorous adults have tended to migrate and where population has generally become dense. Density of population and insanity go hand in hand.

There has been a steady increase in the number of patients with mental disease in public institutions. In 1880 this number was 81.6 per 100,000; in 1920 it was 220.1 per 100,000.

Investigations show that about 4.5 percent of the general population may expect to succumb to mental disease.

A point of importance is that the death rate of mentally afflicted patients in institutions is very high—74.3 per thousand, as against 13.1 per thousand of the general population. Nature tends to kill off the unfit, even when they are receiving due care. Also, the additions to the unfit by lawful marriage is below the average, although it is probable that illegitimate additions keep the level about normal.

Dr. White stresses the observation that there is apparently a close correlation between psy-

chologic and somatic developments. The asthenic somatic type of individual, who reacts badly to physical disease and easily yields to it, corresponds to the schizoid mentality with feeble social compensation. On the other hand, pyknic physical types, with a strong reaction to disease and a fine physical build, correspond to the types of mental disease patients with a strong compensatory reaction, who are able to make social adjustments. The point is that there seems to be a law which holds for equal manifestations of reactions at the social, psychic and somatic levels. If this is correct, the future social appreciation of mental disease will have to be different from that of the past and present.

### Low Arterial Pressure in Pregnancy

In *Am. J. Obstet. and Gynec.*, Oct., 1929, Dr. P. F. Williams, of Philadelphia, discusses the significance of low arterial pressure in pregnancy. He finds that definite hypotension occurs in 5 percent of pregnant women. These often mature late and are relatively infertile. A certain proportion of them have had influenza, have weak cardiac musculature or anemia; they are often of asthenic build, underweight, and difficult to build up.

The pregnancies of hypotensive women are characterized by a high percentage of miscarriages and premature labors, and the infants born are smaller than normal.

Tendency to toxemia in such women is relatively slight but they suffer from prolonged labors, characterized by inertia, and operative interference is much more frequent than in normal women.

The stimulus of pregnancy has no effect later on in raising the blood pressure and treatment by various measures uniformly fails to raise it appreciably.

Low arterial pressure is a constitutional expression of obstetric unfitness.

### Indications for Cesarean Section

In *Am. Med.*, Sept., 1929, Dr. P. B. Bland, of Philadelphia, states that it has been well said that the widespread employment of the cesarean operation has been in inverse proportion to the judgment and skill possessed by the individual operator. Since accumulated evidence and data have demonstrated that the operation is by no means the easiest or safest way of overcoming all obstetric difficulties, the inflaming enthusiasm, until recently so widely prevalent, is gradually meeting the cooling check, long overdue, that it really deserves.

Pelvic deformity, contracting either the inlet or outlet to such an extent as to prevent ingress or exit of the fetus, or obstruction due to neoplasm of uterus or ovaries or stenotic obstruction, either congenital or acquired, involving the cervix or vagina, are indications for the cesarean operation. Apart from these, placenta previa and premature separation of the normally implanted placenta may be taken as indications. In placenta previa, no argument is needed, since statistics prove conclusively that both maternal



and fetal mortality are greatly reduced by the cesarean operation, the former by more than two-thirds and the latter by at least one-half.

### Sore Fingers

Experience shows that wounds kept dry suppurate less frequently than those kept moist. In *Lancet*, London, Jan. 26, Dr. T. Kennon, of Liverpool, Eng., points out the very serious effects, often resulting in gangrene and amputation, following the pernicious habit of soaking fingers with an open sore or wound in very hot water or treating them by fomentations and constant squeezing to force out pus, etc.

The treatment for a sore finger, whether the result of a prick or a cut, is to keep it dry. Protect it from squeezing by a thimble or celluloid guard. If a thorn is still in it, do not squeeze. Take a safety razor and slice off the overlying epithelium; this will drag the thorn out and, should the spot suppurate, the denuded area will provide an easy exit for pus and so limit inward spread. If the finger is throbbing, relieve the tension by an incision and then apply moist dressings at body temperature.

The idea that a painful or throbbing injured finger should be kept immersed in very hot or even boiling water is one that is firmly held by the laity. A hot poultice is valuable in acute inflammation with an unbroken skin, but with an open sore it is another matter. Avoid very hot immersions and applications.

### Fever Therapy in Neuropathies

In *Arch. Neurol. and Psychiat.*, Oct., 1929, Drs. H. G. Mehrtens and P. S. Pouppirt, of San Francisco, draw attention to the value of experimentally induced fever in the treatment of neuropathies—a matter which has been observed to a greater or less extent since the earliest times.

Fever resulting from hot baths can be maintained for one or two hours without danger to the patient. The mouth temperature must be raised to at least 104°F. and maintained for one hour to obtain clinical results.

Neurosyphilis seems to offer the most favorable field for treatment by hyperpyrexia, and fever therapy may be used to intensify the effect of antisyphilitic medication. The results compare well with those of malarial therapy.

Frequent amelioration of individual symptoms was obtained in patients with the Parkinson's syndrome following encephalitis, as well as in combined sclerosis. No results were obtained in lateral sclerosis.

### Apparatus for Induction of Muscular Relaxation and Sleep

Dr. J. Rosett, of New York City, in *Arch. Neurol. and Psychiat.*, Oct., 1929, describes an apparatus for the induction of muscular relaxation and sleep, brought about by a wave of encircling pressure applied to the periphery of the body and limbs in the direction of the

venous flow. The instrument appears somewhat like a union suit. It is made of fine, strong, inelastic rubberized cloth, and is composed of a series of strongly joined, flat, beltlike, collapsible tubes, which encircle the limbs and body as high as the armpits.

The tubes are inflated and deflated by an air compressor and exhaust, one after the other in succession, in a direction from the extremities toward the chest, by a special method.

The effect produced is nerve inhibition, but the manner in which this is brought about is not yet understood.

The apparatus has been in practical use for a considerable period and has worked quite satisfactorily in producing relaxation and sleep.

### Foreign Bodies in the Air Passages

Dr. Jos. E. McClelland, of Cleveland, in *Ohio State M. J.*, Nov., 1929, calls attention to the necessity, in every case of acute or chronic pulmonary disease, especially of children, of investigating for the presence of an unsuspected foreign body in their air passages.

The general symptoms indicative of the presence of such a body are dyspnea, cough and fever. When the foreign body is in the trachea, there is usually hoarseness and a croupy cough. Palpation during expiration will help to locate it.

Bronchial foreign bodies are mostly located in the right bronchus. The obstruction forms a complete plug, or only causes a ball-valve action. The latter gives rise to a characteristic picture during expiration; viz., marked emphysema, with the picture of an acute pneumothorax.

A sign that should always be looked for, in any case of suspected foreign body in the air passages, is the asthmatic wheeze, especially present with foreign bodies with sharp edges.

An x-ray picture will generally give valuable information, even though the foreign body is not opaque to the rays.

### Solution of Acacia and Sodium Chloride in Hemorrhage

In *J.A.M.A.*, Nov. 30, 1929, Dr. L. D. Huffman, of Los Angeles, reports experiences following the use of intravenous injections of solutions of acacia and sodium chloride, in more than 300 cases of hemorrhagic and other shock at the Mayo Clinic.

The solution is especially prepared, using 480 Gm. of acacia and 72 Gm. of sodium chloride, distilled water being added to make up 8 liters.

The injection is given intravenously and not faster than 20 cc. per minute. The solution should be warmed to 100°F. Not more than 800 cc. was given to any patient at any one time and ordinarily the injection was not repeated.

An increase in the blood pressure was observed in all recorded cases. This is progressive with the volume of solution injected. The injection of 700 to 800 cc. frequently increased the systolic pressure to 100 mm. or more. The diastolic pressure usually increases 5 to 20 mm.

There was no evidence of gross toxicity nor any injurious effects that could be traced to the injection in any case. Besides the blood pressure increase, there was also an increase in the pulse, the respiration deepened and the general state improved. The need for blood transfusion was often obviated. The author's findings confirm the therapeutic usefulness of solution of acacia and sodium chloride injections.

### Intravenous Medication

In *J.A.M.A.*, Nov. 16, 1929, Dr. N. M. Keith, of Rochester, Minn., discussing the indications for intravenous medication, stresses the importance of using chemical substances of the highest purity and water that is, not only sterile, but also free from all traces of organic matter. Impure water has, undoubtedly, been responsible for a large number of reactions following intravenous medication. The safest procedure is to use water that has been freshly redistilled, through an all-glass still, and quickly sterilized.

Since dextrose is important in intravenous therapy, it is imperative to secure, not only a chemically pure, but also a nontoxic preparation. A wise procedure is to subject each new lot of dextrose intended for intravenous use to preliminary trial by injection into an animal. This precaution has prevented serious reactions.

The rate of injection of intravenous solutions is often too rapid; from 30 to 40 cc. each minute is a satisfactory rate, when a considerable amount of fluid is being injected.

The intravenous method should not replace the older and simpler methods of administration of drugs, but should be substituted only when the latter routes are inadequate or markedly disturbed by disease.

### Removing Tattoo Marks

A modification of Shie's method for the removal of tattoo marks is described by Dr. J. H. Kork, in *U. S. Nav. Med. Bull.*, July-Oct., 1928.

The method is as follows: The area involved is prepared as for a surgical operation. A 50 percent solution of tannic acid in water is then tattooed into the design, care being taken that the solution is carried well into the corium. The area is painted with the tannic acid, and as the tattooing progresses, an assistant adds fresh tannic acid from time to time with a cotton tampon, so that the tattooing is always done through the solution. The skin must be tightly stretched during the operation to minimize the discomfort and to favor penetration of the chemical to the proper depth.

The solution must be tattooed thoroughly into the whole design, care being taken to tattoo it deeply into the corium along the edges of the mark where the pigment usually lies deepest.

As the operation progresses, the design becomes grayish in tint, somewhat hard to the touch and elevated above the surrounding skin. When the operation is completed, the entire design is closely covered with needle marks and the pigment is almost obliterated by the grayish tint and by numerous fine droplets of blood.

The excess tannic acid is then removed from the surrounding area by washing with cold water. Sterile petrolatum or collodion is applied to the adjacent skin, a clear margin of about one-fourth inch being left around the edge of the design. This is done to prevent discoloration of the skin during the next stage.

A stick of silver nitrate is then rubbed vigorously into the treated area, forming a heavy deposit of silver tannate in the corium. When this step is completed the design itself and the gray discoloration made by the tannic acid are entirely obliterated by the silver tannate. The petrolatum is wiped off and the field is washed with cold water. If there is any doubt as to the thorough penetration of the silver tannate into the corium, it is well to dress this area with some of the tannic acid solution; otherwise a sterile dressing is all that is required.

No anesthetic is used. The process is no more painful than the original tattooing. There is very little induration.

The tattooed area, in about 12 hours, becomes hard and leathery and is not painful to moderate pressure. In 10 or 12 days the edges become free and in about 16 days the tattooed area drops off in a thin piece resembling leather. This carries with it more or less of the design. A thin layer of epithelium slowly forms while the tattooed area separates. Often deposits of pigment will be found where the design was deepest. These may be removed by repeating the original process. Most satisfactory results are obtained on tattoo marks of less than one year's duration. Old marks are deeper.

### Prognosis in High Blood Pressure

In *Ann. Intern. Med.*, Nov., 1929, Dr. W. W. Herrick, of New York City, sums up the factors affecting the prognosis of high blood pressure as follows:

Unfavorable features are: a family history of cardiovascular disorders, a relatively high diastolic pressure and, chiefly, evidence of degeneration in certain selected parts of the cardiovascular system. These evidences are those of marked arteriosclerotic changes in the cerebral, retinal, coronary, renal or pancreatic arteries or in the aortic arch. Signs of myocardial weakness make for a bad prognosis.

Among the functional tests, that revealing a lack of normal response to effort on the part of pulse rate and blood pressure, when existing with advanced structural changes in the circulatory system, is a not unimportant item in an unfavorable prognosis. This is especially true where both systolic and diastolic pressures are fixed at high levels and do not vary after effort.

Of the favorable features, the following may be mentioned. High blood pressure, in the absence of demonstrable organic cardiovascular changes, may not shorten life. This is especially true of cases in women, appearing about the time of the menopause. High blood pressure, with predominant changes in the larger peripheral vessels, and with little change in the aorta or retinal vessels, may be viewed with much less concern than those with marked changes in the smaller arteries. This is particularly true of cases with normal diastolic pres-

tures and of those without albuminuria and glycosuria. Cases retaining their capacity to respond by a normal or exaggerated rise in blood pressure after effort carry a better prognosis than do those in which this capacity has been lost.

### Dextrose Injections in Tinnitus Aurium

In *Eye, Ear, Nose and Throat Monthly*, Nov., 1929, Drs. Leon Felderman and J. M. Dyson, of Philadelphia, maintain that tinnitus aurium, for which no specific cause exists, is generally caused by increased or fluctuating intralabyrinthine endolymphatic pressure.

On the assumption that changes of cerebrospinal osmotic tension should affect endolymphatic pressure, this method of therapy was tried in 5 cases, by the injection of dextrose solution, and the tinnitus was ameliorated in 60 percent. The method was as follows:

The patient was prepared for lumbar spinal puncture in the conventional manner; the needle was inserted between the third and fourth lumbar vertebrae and 5 cc. of fluid withdrawn; another syringe, containing 4 cc. of 5-percent, sterile dextrose solution, then replaced the first syringe and the solution was slowly injected; the needle was quickly withdrawn and the patient placed flat on his back for the next 8 to 12 hours. If necessary this procedure is repeated at weekly intervals, until definite results are obtained.

Simple spinal puncture and partial drainage did not ameliorate the condition.

### Vein Occluder for Varicose Vein Injection

In *J.A.M.A.*, Nov. 2, 1929, Dr. F. V. Theis, of Chicago, describes a vein occluder which he saw used in the Vienna clinics in the injection treatment of varicose veins. It consists of a metal, leather-covered ring, which is pressed down over the area in which the injection is to be made. The pressure is applied by a stirrup when the operator works alone, and by a handle attached to the ring when there is an assistant. The occluder is applied when the patient is lying on the table. The instrument helps to empty completely the peripheral vessels, and this is also hastened by digital pressure within the loop. The occluder is kept in position for at least five minutes after the sclerosing substance has been injected into the emptied veins.

### Argyrosis of the Conjunctiva

According to Dr. M. F. Weymann, of Los Angeles, in *J.A.M.A.*, Nov. 2, 1929, argyrosis of the conjunctiva is not uncommon and usually follows local medication with silver salts.

For treatment the most satisfactory technic is as follows:

Using sterile water and sterile bottles, one should first make a 12-percent solution of sodium thiosulphate and a 2-percent solution of potassium ferricyanide, not ferrocyanide. The solutions are not further sterilized.

The conjunctiva is cocainized with a 5-percent solution, and epinephrin is instilled. Two parts of ferricyanide solution are mixed with one part of thiosulphate solution, and from 10 to 15 minims (0.6 to 0.9 cc.) are drawn into a 2 cc. syringe with a number 26 platinum needle. The solution is injected as superficially as possible under the pigmented conjunctiva, the needle point being moved to as many different areas as possible while the fluid is being injected. After withdrawal of the needle, the bleb should be massaged thoroughly, through closed lids. The injections are repeated wherever the pigment is most dense. In areas in which two injections overlapped, there was some further clearing on the second injection.

### Sterilizing Sodium Bicarbonate for Intraperitoneal Use

Sodium bicarbonate has been the alkali of choice for combating acidosis, especially for parenteral injection, but difficulty has been found in sterilizing it.

In *Am. J. Dis. Child.*, Nov., 1929, Dr. A. T. Shohl, of Cleveland, gives the following method by which the pH of a solution of sodium bicarbonate may be first adjusted with carbon dioxide to the proper degree and, subsequently, autoclaved without loss of carbon dioxide:

One hundred (100) cc. of 1.3-percent sodium bicarbonate solution (isotonic) is placed in a 200-cc. Pyrex flask. A few drops of phenol red are introduced and carbon dioxide, from a tank, is passed into the solution until the color corresponds to that of the standard buffer solution at pH 7.2 (i.e., 8 parts of 15-molar sodium phosphate and 2 parts of sodium biphosphate) which contains the same amount of indicator. A rubber stopper is inserted tightly. This is covered with two layers of tinfoil or heavy paper. A string is tied tightly around the neck of the flask to hold the stopper in place. The flask is then autoclaved at 15 pounds pressure for 15 minutes. Occasionally a stopper will leak or a flask will break in the autoclave. The temperature should be reduced gradually. The solution heated becomes more alkaline or, if chilled in the icebox, more acid owing to the effect of temperature on exchange of carbon dioxide in and out of the solution. On return to room temperature, its original color should return. The solution should keep at least 2 weeks without alteration.

### Sex and the Physician

In *Urol. and Cutan. Rev.*, Nov., 1929, Dr. A. A. Brill, New York, points out that, to a great extent, psycho-sexuality is still a terra incognita in the practice of medicine. Whenever a physician is confronted with a psycho-sexual problem, there is usually also a social or ethical conflict, and a neurosis or psychosis behind it. Superficial advice, therefore, does not help and often hurts. Physical treatment has never cured psycho-sexual problems; it usually does some harm.

A knowledge of the psychology of sex is indispensable. Every physician should know enough of the normal and abnormal factors of

sex to be able to discuss them intelligently, for one must not forget that the most abnormal perversions often originate in the "cleanest and most wholesome" environments. Psycho-sexual instruction should, therefore, form a part of the curriculum of every medical school.

As psychoanalysis has been one of the greatest factors in illuminating the various manifestations of normal and abnormal sex, every physician would be greatly benefited by studying the works of Freud and his pupils. By presenting to us the complete picture of the psycho-sexual evolution, from infancy to adolescence, Prof. Freud integrates sex with our psychic life and gives us a thorough comprehension, not only of the normal impulse, but also of the normal roots of the perversions and their negatives, or the neuroses.

### Treatment of Dementia Precox by Induction of Fever

In *Muench. Med. Wchnschr.*, 28 June, 1929, Dr. Menninger-Lerchenthal recommends the induction of fever as a treatment for dementia precox.

The method of choice was the employment of Besredka's antityphoid vaccine. A preliminary dose of 25 millions of dead germs is injected, followed by a dose of 50 or even 75 millions until a thermal reaction of 39°C. (102.2°F.) is obtained. A total dosage of 800 millions may be reached, the patient being kept on a milk diet.

Reactions of importance are practically absent.

In 68 cases treated, the author observed 21 remissions, 22 durable improvements, 11 cases aggravated and 14 not changed. The remissions are much more frequent than in control cases, but still they are only temporary and sometimes partial and the usual therapeutics of the condition should be continued.

### Thyroid Medication in Hebephrenic Dementia Precox

Drs. R. G. Hoskins and F. H. Sleeper, in *Endocrinology*, Sept.-Oct., 1929, report the case of a man 34 years old, suffering for about 2 years from hebephrenic dementia precox. The man showed no significant gross physical abnormalities; his protein metabolism was unsatisfactory; his pulse, blood pressure, temperature, basal metabolic rate and vital capacity were low; the prognosis was one of further deterioration.

After consideration of all the factors, the case was diagnosed as one of thyroid deficiency.

Under thyroid medication, the psychotic picture became, first, more nearly that of catatonia; then strikingly improved toward normality. Repeated metabolic studies showed that the glandular deficiency was only partially corrected, but the improvement reached a stage justifying discharge from the hospital on probation.

The case is reported to show the significance

of endocrine factors in dementia precox and as an exemplification of results secured in several other instances.

### Dextrose-Insulin Injections in Shock

In *Anesthesia and Analg.*, Sept.-Oct., 1929, Dr. P. A. Wade, of New York City, points out that the value of any intravenous therapy in the treatment of shock rests, for the most part, on the replacement of lost blood volume.

Dextrose, given intravenously, with insulin subcutaneously, gives results in the treatment of shock which seem more satisfactory than those obtained by saline solution or dextrose alone. The optimal dose is 1000 cc. of a 5- or 10-percent solution of dextrose, with one unit of insulin to each 3 Gm. of dextrose. Beneficial results are usually apparent after 800 cc. of fluid have been injected.

Cases of shock, in which the blood pressure is decreasing toward the critical level (80 to 90 mm.), should be treated immediately, before the sudden fall which often follows, with symptoms of severe shock.

### American Diets and Degenerative Diseases

In *J.A.M.A.*, Nov. 23, 1929, Dr. L. Langstroth, of San Francisco, stresses his opinion that American diets in general are deficient in the so-called protective foods that are rich in vitamins, and that they are causative of degenerative diseases.

The investigation of 501 dietary histories of patients suffering from hypertension, myocardial degeneration, arteriosclerosis, arthritis, chronic gastrointestinal diseases, diabetes, etc., showed that the protective foods (eggs, milk, fruit, vegetables and especially lettuce) formed only 12 percent of the average diet. A good part of the ordinarily consumed food is naturally or artificially concentrated and free from residue and, with the exception of bread and butter, is vitamin poor. The facts elicited seem to support the current criticism that the American dietary contains a large proportion of concentrated food, high in carbohydrate and acid minerals and low in vitamin, residue and alkaline minerals.

Investigation also showed that the percentage incidence of degenerative disease increased as the percentage of protective food decreased.

A diet containing 70 percent of protective food was prescribed in 44 cases of chronic circulatory disease, 75 cases of chronic arthritis, 55 cases of chronic gastrointestinal diseases and 247 other cases with degenerative diseases. Seventy-three (73) percent of these patients were much improved or completely relieved. Accompanying changes in body weight, skin, subcutaneous tissues, sclerae and visible mucous membranes, seemed to indicate a general tissue change throughout the body.

# NEW BOOKS

## Hart: Psychopathology

**PSYCHOPATHOLOGY.** Its Development and Its Place in Medicine. By Bernard Hart, M.D. (Lond.), F.R.C.P. (Lond.), Physician in Psychological Medicine, University College Hospital and National Hospital, Queen Square, London. New York: The Macmillan Company. Cambridge, England: At the University Press. 1927 Price \$3.25.

In this volume are to be found the three Goulstonian Lectures, delivered by the author before the Royal College of Physicians of London, in March, 1926, together with two other essays previously published: "The Psychology of Rumor" and "The Methods of Psychotherapy."

Much of the ground here covered is sketched, in a simpler and more practical manner, in Dr. Hart's smaller book, "The Psychology of Insanity," which was recently reviewed in our columns (see C. M. & S., Feb., 1930, p. 162). This is a more elaborate and technical consideration of the psychologic concept of the cause and cure of disease.

"The Psychology of Rumor" is a very interesting study of the nature of the almost unescapable errors in evidence, and should be very valuable to lawyers and psychologists.

This book is one especially for those who are specializing in psychotherapy. The smaller work here mentioned is more suited to the needs of practitioners.

## Riddle: Pernicious Anemia

**A MANUAL FOR PATIENTS WITH PERNICIOUS ANEMIA.** Compiled by The Staff of the Simpson Memorial Institute for Medical Research Under the Special Direction of Matthew C. Riddle, M.D., Fellow of the National Research Council; Resident Intern and Junior Assistant in Research. Ann Arbor, Mich.: George Wahr, Publisher. 1929. Price \$1.00.

The great success which has followed the liver treatment of pernicious anemia and the extent of the literature of the subject has made it inevitable that, sooner or later, a guide book for patients would be called for.

The present manual for patients supplies the want. It has been compiled by the staff of the Simpson Memorial Institute for Medical Research, of Ann Arbor, Michigan. It explains the nature of the disease, the reasons on which liver therapy (including liver extract) is based and a large number of recipes for the preparation of this food in an agreeable form. Recessions in improvement under liver therapy have occurred, principally because patients have left

institutions and failed to follow medical advice. This little handbook will show them the necessity for keeping under the physician's supervision, as well as methods of varying what might otherwise be a monotonous diet. It may and should be recommended by physicians to their pernicious anemia patients.

There are several manuals for diabetic and tuberculous patients, all serving a useful purpose, but this is the first book we have seen which offers expert help to those who are fighting their battle against the equally chronic disease, pernicious anemia.

## Robinson: Pathfinders in Medicine

**PATHFINDERS IN MEDICINE.** By Victor Robinson, M.D., Editor of the *Pagel-Sudhoff Handbook of the History of Medicine*. New York: Medical Life Press. 1929. Price \$10.00.

Dr. Robinson has taken advantage, in issuing this second edition of his well-known biographic work, "Pathfinders in Medicine," to extend it greatly, not alone as regards the number of "pathfinders," but in the details of their lives and works.

The pioneers whose lives are represented so vividly in these fascinating pen-pictures are all real. From Galen to Pavlov, they present a galaxy of thirty, about whom center all the great advances that have been made in the science and practice of Medicine. Time almost loses its significance when we see this scientific linking up of the ages and note that, amid the stresses and strains of political and religious upheavals, there was, in every age, someone who kept the lamp of science trimmed and fed and passed it, brightly burning, to his successor.

Dr. Robinson has done his work well. Here we have no prosaic, cut and dry biographic details, but pictures which at once bring us into touch with the living man, his ideals, aspirations, hopes, disappointments and sometimes triumphs. The reading is more fascinating than that of fiction, for we are dealing with real men whose work is our own legacy.

The particular note that will impress itself upon the reader is the dogged opposition to the exposition of truth and new ideas in all ages. The truth-tellers are considered and treated as heretics. We are accustomed to associate this sort of thing with religious dogmatism, but the dogmatism of authority in science, and especially in medical science, is well depicted in the lives of the medical pioneers, as sketched by Dr. Robinson. It is only occasionally, as in the cases of Jenner, Virchow and Pasteur, for example, that those who promulgated new medical truths lived to see them accepted and approved



by the entire profession and to reap the material honors due to their work.

A book of this kind should be in every physician's library, not only for the pleasure and the increase of one's knowledge that follows its perusal, but also because it offers an incentive to every physician, no matter how restricted his opportunities and how isolated he may be, to contribute something to scientific progress which, like the researches of William Beaumont, may cause a reverberation through the world.

### Emerson: Diagnosis of Health

THE DIAGNOSIS OF HEALTH. By William R. P. Emerson, A.B., M.D., Professor of Pediatrics, Tufts College Medical School; Medical Consultant in Physical Fitness at Dartmouth College and Other Educational Institutions; etc. Illustrated. New York, London: D. Appleton and Company. 1930. Price \$3.00.

We are living in an age when prophylaxis is the watchword. We know that, generally, we can be cared for adequately in case of sickness, but what we are most concerned with is to keep fit and healthy, as we fully understand that this is the first essential in the enjoyment of life.

Dr. Emerson has won a reputation for himself by his prophylactic health work in many schools and other institutions with which he has been or is connected. In this book he shows the methods by which good health may be acquired and maintained by almost anyone. It is not merely a manual of hygiene, but the training of oneself, mentally as well as physically, to have what might be termed a sense of health. There are common-sense rules for attaining the highest possible physical fitness.

The work is divided into three parts: Part I deals with the diagnosis of health, giving all the standards and data which are usually accepted as concomitant with this condition; Part II outlines the training for physical fitness, covering the gamut of personal hygiene; Part III consists of group and case studies.

This is a book for mothers, for school teachers and principals, but especially for the school physician or any physician who is charged with the care and development of the young. Too few medical men know how to examine a person for health, as their time is spent in examining for disease.

The bookmaking is above reproach.

### Seham & Seham: The Tired Child

THE TIRED CHILD. By Max Seham, M.D., Assistant Professor of Pediatrics, University of Minnesota; and Grete Seham, Ph.D., Formerly Professor of Medical Chemistry, University of Minnesota. With a Foreword by Isaac A. Abt, M.D. Illustrated. Philadelphia and London: J. B. Lippincott Company. 1926. Price \$2.00.

One of the most pitiable results of modern civilization, especially as seen in the crowded city, teeming with cramped tenements euphemistically termed apartment buildings, is the problem of raising healthy children. Exercise in the open is limited, the air is polluted, sunlight is

deficient and confinement is excessive. No wonder the urban school child is always tired. Indeed, for that matter, the urban adult is tired too.

The present book deals with this problem of chronic fatigue in children. It is divided into three parts: Part I deals with the fundamental principles of growth and development and with the physiology and psychology of work in childhood; Part II discusses the nature and causes of fatigue; Part III deals with the prevention and management of chronic fatigue so far as they fall within the province of the parent and school teacher. A schedule of rational health habits is presented which are calculated to offset the factors which tend toward defective development and tiredness.

The book, while especially directed toward the guidance of parents and teachers, has much that should appeal to the physician, not merely because he is the guardian of community health but from biologic considerations associated with the economic problems of the present day life.

### Lippman: Preface to Morals

A PREFACE TO MORALS. By Walter Lippman. New York: The Macmillan Company. 1929. Price \$2.50.

That the world is in the midst of an almost unprecedented state of ferment, is fairly obvious to thinking people. It is well, therefore, that someone should voice that unrest, now and then, and attempt to clarify our conception of what it means. This has been Lippman's task.

The text is divided into three parts: The Dissolution of the Ancestral Order; The Foundations of Humanism; and The Genius of Modernity. Each of these is discriminatively divided into chapters and sections, making the book easier to read.

The main thesis is that the traditional, extraneous inhibitions of the formalized religion of authority are breaking down, as regards the intellectual and progressive strata of society, and, that, for our social salvation, we must find a reasonable and workable substitute.

This motivating force for an emancipated world, the author describes in the tenets of what he calls "high religion," as distinguished from the "popular religion" of extraneous compulsion, with whose dissolution he begins his discourse. This "high religion" is what is sometimes called the "mysteries," or higher degrees which have existed in all of the great faiths which have sustained mankind. It has never, heretofore, been for the masses, but for a chosen and highly developed few. Now, Lippman believes, it must be far more generally accepted, to save us from the horror and destruction which await a society devoid of a perception of fundamental moral values.

The heart of this philosophy, which has sufficed the saints and sages of all times, is the recognition that the universe was not made for our personal satisfaction and that its laws and processes are not modifiable for our personal comfort—that happiness comes only with the understanding of these laws and the willing adaptation of ourselves to their requirements. We must mold ourselves to fit Nature; not

Nature to meet our whims. This he calls the development of the adult viewpoint or the achievement of disinterestedness.

The book is too long. Too many words are used. The points could have been made, even more convincingly, in one-third or one-half the number of pages.

But most of the pages are illuminated by one or more flashes of keen perception or felicitous turns of phrase, which carry an idea across to a point of lodgment in one's permanent intellectual equipment.

This volume should be and will be, widely read; and those who forego that pleasure because they have to do a bit of wading in sometimes-turbid waters, will miss a number of things that are eminently worth while.

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### Potts: Getting Well and Staying Well

GETTING WELL AND STAYING WELL. A Book for Tuberculous Patients, Public Health Nurses, and Doctors. By John Potts, M.D., Fort Worth, Texas. Introduction by J. B. McKnight, M.D., Superintendent and Medical Director, Texas State Tuberculosis Sanatorium. Second Edition. St. Louis: The C. V. Mosby Company. 1930. Price \$2.00.

Dr. Potts' book is intended principally as a guide for persons afflicted with tuberculosis. It also contains much information regarding the diagnosis and management of the disease, that can be used with profit by public health nurses or general practitioners.

The text is written in very simple language and technicalities are avoided, so that laymen can understand easily everything that is said.

Dr. Potts is an advocate of the rest cure and he stresses the necessity for exact cooperation by the patient with the doctor, until the latter pronounces the cure completed or, at least, sufficiently advanced that some of the restrictions placed on the patient may be removed.

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### Campbell: Orthopedic Surgery

A TEXTBOOK ON ORTHOPEDIC SURGERY. By Willis C. Campbell, M.D., F.A.C.S., Professor of Orthopedic Surgery, University of Tennessee, College of Medicine; etc. Illustrated. Philadelphia and London: W. B. Saunders Company. 1930. Price \$8.50.

The appearance of Dr. Campbell's book on orthopedic surgery coincides with the culmination of gradual changes in the conception of orthopedics and may be said to be representative of them. Orthopedic treatments have traveled far afield from the original ideas of manipulative correctional procedures and the scalpel and osteoclast are now used more frequently than the steel brace.

There are 18 chapters. The first three chapters are general. Six chapters are devoted to affections of the joints; four to affections of the bones and five to those of the soft tissues. So far as possible, the arrangement in the different chapters is regional. Dislocations, fractures,

bone tumors, tuberculosis of the joints, obstetric paralyzes and certain dystrophias are considered as coming within the scope of the orthopedist.

A great virtue of this work is its conciseness. No words are wasted and everything that is said is straight to the point under discussion. The various accepted methods of treatment are described and illustrated with sufficient detail to bring out the salient points. We are especially struck with the manner in which the author deals with joint affections, especially the arthritides, both infective and traumatic; also the operative treatment of the sequelae of anterior poliomyelitis will be found very clear and praiseworthy.

Many of the methods described are original with the author.

The bookmaking is commendable; the type is clear and legible and the paper heavy and of good surface. There is an ample index which makes it easy to find what is wanted. The volume should quickly take its place as one of the leading American textbooks of orthopedic surgery representative of the approved present-day practice. It is a book not for the surgeon only, as general practitioners will find that many of the treatments described come within their scope.

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### Practical Medicine Series: Surgery

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. General Surgery. Edited by Evarts A. Graham, A.B., M.D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes Hospital and of the Children's Hospital, St. Louis. Series 1929. Chicago: The Year Book Publishers, 304 South Dearborn Street. Price \$3.00.

This Review of Surgery for the year 1929 is one of the best volumes of this annual series that we have seen. It is excellent in regard both to the extent of matter reviewed, the abstracting, illustrating and editing, and it reflects credit on the editor and publishers.

While the bulk of the periodical literature is American, a very fair amount of foreign literature is also covered.

The surgeon who has not had either the opportunity nor the time to keep posted on the progress of the past year in surgery, as reflected in the literature, will find this an excellent resume of it and well worth the cost.

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### Eye, Ear, Nose and Throat

THE PRACTICAL MEDICINE SERIES. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. The Eye, Ear, Nose and Throat. Edited by Charles P. Small, M.D., Albert H. Andrews, M.D., George E. Shambaugh, M.D. Series 1929. Chicago: The Year Book Publishers, 304 S. Dearborn Street. Price \$2.50.

This annual medical review consists of eight volumes which cover medicine and surgery. The present volume summarizes the literature on the eye, ear, nose and throat for 1929. Dr. Chas. P. Small edits the eye section; the ear literature is dealt with by Dr. A. H. Andrews, and Dr.

G. E. Shambaugh criticizes contributions dealing with the nose and throat.

Looking over the book it is apparent that the work has been very fully and conscientiously done; there is no doubt that any practitioner, reading the abstracts, obtains a good idea of what progress has been reported in the year's literature, and in this wise the work fulfils its purpose.

The articles reviewed, however, are almost entirely taken from American medical journals and, as a complete review should include the important work done abroad, it would seem very desirable that the principal articles appearing in the special journals published abroad should be included.

### Robinson: Birth Control

**PRACTICAL PREVENTION OF THE TECHNIQUE OF BIRTH CONTROL.** Giving the Latest Methods of Prevention of Conception, Discussing their Effect, Favorable or Unfavorable, on the Sex Act: Their Indications and Contra-indications, Pointing Out the Reasons for Failures and How to Avoid Them. For the Medical Profession Only. By William J. Robinson, Ph.G., M.D., Pioneer of the Modern Birth Control Movement in America; Editor of "The Critic and Guide," Author of "Birth Control or the Limitation of Offspring by Prevention;" etc. Hoboken, N. J.: The American Biological Society. 1929. Price \$5.00.

Several books on birth control have appeared recently, all of which have been valuable. This is the smallest, as well as the most direct and unequivocal of them all, as it is the personal opinions of one man, based upon his own extensive experience, rather than a report of experiments or a consensus of ideas.

Dr. Robinson was one of the pioneers of the birth control movement in this country, as well as in the study of sex as a factor in human life, so he brings to his task a keen appreciation of the problems involved.

The entire book can be read in an hour or two, and the style is so easy and conversational that this is no hardship.

Every physician should possess some work on this subject, and this little volume serves every purpose of practical advice and instruction.

### Selwyn-Brown: Physician Throughout the Ages

**THE PHYSICIAN THROUGHOUT THE AGES.** By Arthur Selwyn-Brown, B.Sc., M.A., Ph.D., LL.D., Assisted by Distinguished Medical Specialists. In Two Volumes. Illustrated. New York: Capehart-Brown Co., Inc., Times Bldg. 1928. Price \$25.00.

This elaborate work is one which it is difficult to appraise and more difficult to review. Perhaps the best way to describe it is to cite the author's statement in the foreword that it is a treasury of facts about the physician, his struggles, sufferings, triumphs and rewards.

The aim is ambitious, insofar as it purports to follow the development of the physician from prehistoric times to the present day; but the

author, who must have consulted and boiled down an enormous amount of material, has really succeeded in giving a popular, entertaining and fascinating story, and the reader who is not disturbed by too keen a sense of criticism and is willing to accept statements at face value, without analyzing their validity, will find extensive fields in which he can browse with diversion and interest.

Much of the matter concerning early medical development and the men who made it must necessarily be apocryphal, and, provided it is regarded as such, it does no harm; a good deal of the story of the physician in former days, as told here, is of this type and, indeed, a good deal of modern medical history must be carefully and analytically sifted to separate what is really authentic and true progress from what is pseudo-scientific bluffing.

The work comprises nine books divided up into two large volumes, each of which has nearly a thousand pages. The books take up special phases of medical activity or epochs. Books I and II deal with ancient and medieval medicine; Books III and IV deal with the inception of modern medical science; Books V, VI and VII deal especially with American medicine, and the historical and biographic material presented here seems to us the most valuable part of the whole work.

There are over 400 illustrations which lend much to the interest of the text.

While the work, as a whole, cannot be regarded as a serious contribution to history, it may be recommended to physicians and laymen as presenting a cyclopedic compilation of a great deal of scattered biographic and other knowledge regarding the medical profession in all ages, and telling the story of medical progress in a popular and entertaining way.

The typography is excellent and the books are strongly bound in impressioned fabricoid.

### Dakin: Mrs. Eddy

**MRS. EDDY, THE BIOGRAPHY OF A VIRGINAL MIND.** By Edwin Franden Dakin. New York and London: Charles Scribner's Sons. 1929. Price \$5.00.

Whatever one may think about the merits of Christian Science, one way or another, it is certain that the founder of that cult was not a negligible person. Nor has she been so considered. No woman whom thousands of persons regard as a demigod, or even a deity, is insignificant.

The zeal with which Mrs. Eddy's highly and effectively organized present-day followers are trying to suppress Mr. Dakin's effort, as reported by the publishers, the *New Republic* and other sources of information, would indicate that they consider as sacrilege any statements regarding their leader, however true they may be, which do not paint her in the rosiest colors. They clamped the lid on Georgine Milmine's "Life of Mary Baker G. Eddy" so effectively that a copy of it is, today, a "museum piece," and they are said to be using intimidation and a threat of boycott against the booksellers who handle this biography. The outcome will be interesting to watch.

Mr. Dakin's sincere appreciation of Mrs. Eddy's power and driving motive is sincerely expressed when he says: "When she said that her course was 'impelled by a power not one's own,' it would not matter if she erred. For at least she was impelled. This is enough. The force in her of that great inner Will which in every being creates its own fulfilment—compensate how it must—needs no justification. It is beyond the little human labels of 'good' and 'evil.'"

Here one finds the intensely dramatic story of how a little, frail, destitute, hysterical, fear-ridden old woman, past sixty years old, rose within a decade or two, by virtue of that driving urge within her, which some may call by harsh names which do not matter, to be a world figure and a millionaire and achieved apotheosis by her followers.

The author of this biography had access to the "Quimby Manuscripts," to Milmine's "Life," to the early editions of "Science and Health" and to other documents, and he quotes page and paragraph with pleasing certainty.

The tale of her lean, tempestuous and frustrated early life is followed by the story of the development of a "borrowed" manuscript into a scripture; and that by the history of her deification, her reign and her decline, all vividly but simply set forth. Her biographer speaks of her as a virginal mind, because she was "never wedded to reality."

The complicated plan by which she made her church irrevocably hers is worthy of a Napoleon or a Mussolini. Whatever Mrs. Eddy was or was not, she was as far as possible from being a fool.

Dakin's style is easy and sometimes brilliant, and the narrative flows along, smoothly and connectedly, like a compelling story, giving one the impression of entire sincerity and freedom from prejudice, one way or the other. The book will keep one up o' nights.

It is to be hoped that this biography will be widely read, both because it is well that we should know the truth about outstanding personalities, and as an encouragement to the publishers to resist forcible measures of censorship by an organized minority.

### Beaumont & Dodds: Advances in Medicine

RECENT ADVANCES IN MEDICINE. Clinical, Laboratory, Therapeutic. By G. E. Beaumont, M.A., D.M. (Oxon.), F.R.C.P., D.P.H. (Lond.), Physician with charge of Out-Patients, Middlesex Hospital; etc.; and E. C. Dodds, M.V.P., M.D., Ph.D., B.Sc., M.R.C.P., (Lond.), Court-aud Professor of Biochemistry in the University of London; etc. Fifth Edition. Illustrated. Philadelphia: P. Blakiston's Son & Co., Inc. 1930. Price \$3.50.

This book is a synopsis of the newer laboratory methods which are considered as more or less essential to the general practitioner in order to establish the diagnosis of certain diseases with precision. It may be considered as a laboratory complement of clinical diagnosis.

There are 15 chapters, each one of which deals with the common tests for particular regional

disease syndromes or with the procedures associated with the examination of abnormal blood and urine.

The authors have designed the work to be especially suitable for physicians who have not had the opportunity of becoming acquainted with recent advances in medical science by postgraduate courses, especially those advances in the application of physiologic and biologic principles to medicine. In every way the volume appears to fulfil this principal object in a concise but sufficient manner, and should be a really valuable addition to the library of any clinician.

### Goldbacher: Injection Treatment of Hemorrhoids

HEMORRHOIDS; THE INJECTION TREATMENT AND PRURITUS ANI. By Lawrence Goldbacher, M.D., Philadelphia. Illustrated with 31 Half-tone and Line Engravings Some in Colors. Philadelphia: F. A. Davis Company, 1930. Price \$3.50.

This short volume is devoted to descriptions of the rationale, technic and results of the treatment of hemorrhoids and pruritus ani by injections of phenol in vegetable oil. There are four parts: Part I deals with general considerations; Part II with external hemorrhoids and their treatment; Part III with the treatment of internal hemorrhoids by the injection method, the author claiming that nearly every such case may be successfully and permanently cured without operation, without loss of time and without pain; Part IV deals with pruritus ani.

The book is recommended to physicians who are interested in the injection method of treating the conditions referred to.

### White: Mental Hygiene

THE PRINCIPLES OF MENTAL HYGIENE. By William A. White, M.D. With an Introduction by Smith Ely Jelliffe, M.D., Ph.D. New York: The Macmillan Company, 1928. Price \$2.75.

Since the mind is just as truly a part of a man's equipment as is the physical body, it seems strange, when we remember for how many years the hygiene of the body has been taught, that the hygiene of the mind strikes many as a new and rather bizarre idea.

Dr. White is one of the most advanced and cogent thinkers along this line, and it is well that he has put some of his conclusions into a form which will make them readily available to many.

Some of his ideas will be better grasped by studying a few quotations.

"Pain is not a physical, but a mental fact.

... If a man had no mind, he could have no pain."

"Our psyche bears the records of its hundreds of thousands of years' development within itself, as truly as does our body."

"The word 'insanity' comes to be, as I see it, not a medical term at all, but a social term which defines certain kinds of socially inefficient conduct."

His main thesis is that those we call "insane" and those we call "criminal," are merely two

types of socially inadequate persons, and that our different feeling toward them is based upon the fact that the abnormal conduct of the insane man seems to us to be wholly illogical, from a psychological standpoint; while the act of the criminal is one we could almost have done ourselves. We must hate criminal conduct, in order to keep us from doing similar things.

Among the most valuable chapters are those on *The Insane*, *The Criminal*, *The Feeble-Minded*, and *The Neuroses*. The keynote of the whole work is individualization, in dealing with all types of psychic abnormalities. "The jury," he says, "is only a bit of machinery for transmitting the herd critique."

It seems rather too bad that so valuable a book as this should bear evidences of haste in its preparation. Those who know Dr. White are well aware that he could, by proper editing, have made a more pleasing and impressive presentation of his material, by eliminating a good deal of unimportant matter and correcting errors in English and ineptitudes of expression. The pages, however, teem with sentences which have the force of epigrams.

No psychiatrist can afford to miss this real contribution to the study of the psychic life, and no practitioner can read it without enlarging his outlook and his usefulness.

### Temperance or Prohibition: Hearst Committee

TEMPERANCE—OR PROHIBITION? *The Hearst Temperance Contest Committee*, Francis J. Tietz, Editor. New York: New York American, Temperance Book Dept., 220 South St. 1929. Price \$1.00.

Temperance or Prohibition! Surely a most alluring title and a subject that throbs to the nation's pulse at the present moment. Do you favor the total repression of alcoholic liquors? Do you think the Volstead Law ought to be modified? Are you convinced that Prohibition has increased national prosperity and social betterment? Do you think it has increased crime and disrespect for law? Is its enforcement a failure and should it be repealed and, if so, how? Does Prohibition mean Temperance?

These and many other questions are agitating the minds of millions of our worthy citizens today, whether they favor Prohibition as a national policy or not.

The book under notice is the boiled down essence of information gathered by the Hearst Temperance Contest Committee, a prize of \$25,000 having been offered for the best solution of the Prohibition or Temperance question. Over 100,000,000 words on every conceivable phase of the question were received from the 72,248 contestants for the prize, which was awarded to Judge Franklin Chase Hoyt, of New York City, whose plan is given here.

Every man and woman in the land is entitled to his or her personal view on this broad issue. But, whatever may be one's opinion, the recorded evidence given here cannot be ignored. From legislators, clergymen, teachers, business men, labor leaders, housewives, mechanics—in fact from all types of persons who make up the

citizen body—criticisms in regard to the working of Prohibition are furnished and must be evaluated by anyone who honestly desires to form a sound judgment on this most important subject.

The little boy who, when the old showman presented a picture of Napoleon crossing the Alps, asked which was Napoleon and which the Alps, was answered by, "You paid your money, my boy, and you can take your choice." In this case pay your dollar for this immensely entertaining and instructive book; read it and then take your choice.

### Stephenson: Incompatibility

INCOMPATIBILITY IN PRESCRIPTIONS AND HOW TO AVOID IT. To Which is Added a Dictionary of Incompatibilities. By Thomas Stephenson, D.Sc., Ph.C., F.R.S. Edin., F.C.S., Editor of "The Prescriber," Some time Examiner to the Pharmaceutical Society of Great Britain, Author of "The Prescriber's Pharmacopoeia." New Edition, Revised and Enlarged. New York: Paul B. Hoeber, Inc. 1929. Price \$1.50.

All prescribing physicians should have a knowledge of the general principles underlying the incompatibility of drugs. This is not alone necessary from the therapeutic point of view, but more especially from the danger of toxic results.

In this little manual the general principles of drug action are discussed in the first part and then follows an alphabetical list of all the important drugs and their incompatibilities.

While primarily a book for the pharmacist, such knowledge should be always available on the physician's book shelf.

### Pincussen: Blood and Urine Examinations

MIKROMETHODIK. Quantitative Bestimmung der Harn-Blut und Organbestandteile in kleinen Mengen für klinische und experimentelle Zwecke. Von Ludwig Pincussen, Direktor der biochemischen Abteilung des Städt. Krankenhauses am Urban in Berlin. Fünfte, vermehrte und verbesserte Auflage. Mit 34 Abbildungen. Leipzig: Georg Thieme. 1930. Price M. 7.50.

This is an excellent little manual for laboratory technicians who can read German. It gives all the improved methods of estimating small quantities of different substances in the blood, urine and different organs. The book has run into five editions. The author is the Director of the biochemical department of the State Hospital of Berlin.

### Horsley: Medical Addresses

RESEARCH AND MEDICAL PROGRESS AND OTHER ADDRESSES. By J. Shelton Horsley, M.D., attending Surgeon, St. Elizabeth's Hospital, Richmond, Va. St. Louis: C. V. Mosby Company. 1929. Price \$2.00.

The book is compiled from various addresses to medical and surgical societies and other papers published by the author.



The different subjects touched upon have to do principally with those factors which make for success—in the strictly scientific, professional sense—in the practice of surgery and medicine, as well as with the ethics and ideals of the medical profession. Only generalities of practice, not technicalities, are to be found here.

The perusal of these papers should be of great interest to every earnest practitioner of medicine, whether he be a surgeon or an internist. Of course Dr. Horsley, as a surgeon, deals more especially with his own specialty, but his views, in regard to keeping physiology and pathology constantly in sight in handling patients, and trying to discover some new glimmer of scientific truth from each case observed applies to every conscientious doctor. And, in a wider sense, Dr. Horsley's essays will be read with that great interest which a broad humanistic view of one's life work always arouses.

### Cooper: Happiness

THE SECRET OF HAPPINESS. By The Rt. Rev. Irving S. Cooper, author of "Ways to Perfect Health," etc. Revised American edition. Wheaton, Ill.: The Theosophical Press. Price \$1.00.

The universal occupation of mankind is the search for happiness, but, unfortunately, too many fail to find it.

In this little volume of 75 pages, Bishop Cooper has set forth, in simple, pleasing and direct language, the means of attaining this desirable possession. It cannot, he says, be grasped by the man who strives for it directly, but is the result of unselfish striving for the welfare of others.

In these days of turmoil and doubt, the advice of one who speaks with the voice of authority, but without "preaching" or "churchianity," telling us how to be happy, should be heard by all who sincerely desire release from worry and heartburnings and are willing to pay the price of such liberation.

### Spengler: Bang's Disease in Men

DIE BANGSCHE KRANKHEIT BEIM MENSCHEN. Von Dr. Gustav Spengler, em. Assistant der Medizinischen Abteilung des Sophienspitales in Wien (Vorstand Prof. Dr. N. Jagic). Berlin und Wien: Urban & Schwarzenberg. 1929. Price RM 4.

In this short monograph the author traces the incidence of human disease due to infection with Bang's bacillus—the *B. abortus* of cattle and hogs. There is a good bibliography of the literature of the subject.

### Kutschera-Aichbergen: Cardiac Failure

UBER HERZSCHWÄCHE. Von Dr. Hans Kutschera-Aichbergen, Wien. Mit einem Vorwort von Prof. Dr. K. F. Wenckebach. Berlin und Wien: Urban & Schwarzenberg. 1929. Price RM 6.

In this monograph, the author shows that most cases of cardiac failure result from weakness of the heart muscle, and that weakness of this muscle, is due to similar causes to those operating in weakness of skeletal muscles.

### Carey: Bacteriology for Nurses

HANDBOOK OF BACTERIOLOGY FOR NURSES. By Harry W. Carey, A.B., M.D., Assistant Bacteriologist, Bender Hygienic Laboratory, Albany, N. Y. (1901-1903). Pathologist to the Samaritan Hospital, Troy, N. Y.; etc. Third Revised and Enlarged Edition. Illustrated With Forty-Three Engravings and One Colored Plate. Philadelphia: F. A. Davis Company. 1930. Price \$2.25.

This third edition of Dr. Carey's handbook of bacteriology for nurses has been entirely rewritten. It is intended, not only as a textbook to meet the requirements in this subject by the nurses' examining bodies, but also to supply information which will be useful to nurses who may require a more extended knowledge of bacterial diseases.

The text covers the classification and recognition of the common pathogenic bacteria, the phenomena associated with and the diseases due to them. There are 20 chapters. The style is pleasant and reading easy.

### Stuart-Low: Nose, Throat and Ear

THE CARE OF THE NOSE, THROAT, AND EAR. By W. Stuart-Low, F.R.C.S. Eng., Consulting Surgeon to the Central London Nose and Ear Hospital; Lecturer on Rhinology, Medical Graduates' College, London; etc. Second Edition. London: Baillière, Tindall and Cox. 1929.

This little book may be fittingly described as a primer of prophylaxis of the nose, throat and ear for the use of laymen. The main anatomic and physiologic facts are given in simple untechnical language and the early symptoms of pathologic conditions are described, with suggestive warnings of what may happen if neglected.

Little handbooks of this nature for laymen, written by reputable physicians, are eminently desirable. People are always interested in facts which concern themselves, as well as in the marvellous manner in which nature has provided for structure and function. Serious disease may be avoided by attention to simple measures. Physicians may recommend this book, especially to those who are affected by troubles of the nose, throat or ear. The author is a distinguished English rhinologist.

### Christian & Haskell: Physiology for Nurses

A TEXTBOOK OF PHYSIOLOGY FOR NURSES. By William Gay Christian, M.D., Professor of Anatomy, Medical College of Virginia, and Charles C. Haskell, B.A., M.D., Professor of Physiology and Pharmacology, Medical College of Virginia. Second Edition. St. Louis: C. V. Mosby Company. 1929. Price \$2.00.

In this small textbook the elementary facts of physiology are presented in a manner and in language suitable for the pupil nurse.

The first edition was issued in 1918, and much additional information regarding new developments, available since then, has been written into this second edition.

As a textbook for nurses or others who require an elementary course of physiology, this seems excellently suited.

### Bruns and Thiel: Resuscitation

*DIE WIEDERBELEGUNG. Eine Zusammenfassende Darstellung Ihrer Theorie und Praxis.* Von Prof. Dr. Oskar Bruns, Direktor, und Dr. Karl Thiel, Oberarzt, der Medizinischen Universitäts-Poliklinik, Königsberg in Preussen. Mit 26 Abbildungen im Text. Berlin and Wien: Urban & Schwarzenberg. 1930. Price, ger. RM 9.

A monograph on the theory and practice of resuscitation. The different methods of reviving apparently dead individuals are discussed; also the apparatus—pulmotors, etc. Antidotes to poisons are also given. This is a good first aid and emergency book for the physician who reads German.

### Abderhalden: Biologic Laboratory Methods

*HANDBUCH DER BIOLOGISCHEN ARBEITSMETHODEN.* Geh. Med.-Rat Prof. Dr. Emil Abderhalden, Direktor des Physiologischen Institutes der Universität Halle a.d. Saale. Abt. IV, Angewandte chemische und physikalische Methoden, Teil 5, 1. Hälfte, Heft 5 (price RM 6.—). Abt. V, Methoden zum Studium der Funktionen der einzelnen Organe des tierischen Organismus, Teil 8, Heft 4 (price RM 9.—) und Teil 9, Heft 3 (price RM 5.—). Berlin und Wien: Urban & Schwarzenberg. 1929.

Professor Abderhalden's monumental handbook of laboratory diagnostic methods is issued in parts.

Volume IV, Part 5, Section 5, deals with the qualitative and quantitative estimation of certain ingredients in the urine, including the acid components of concretions.

Volume V, Part 9, Section 3 deals with functional tests of the incretory organs.

Volume V, Part 8, Section 4, deals with the laboratory examination of the vascular apparatus, including electrocardiography and micrometry of the capillaries.

The various monographs are written by technical experts and may be considered as representing the latest scientific methods in the particular investigations described.

### Klemperer & Klemperer: Neue Deutsche Klinik

*NEUE DEUTSCHE KLINIK. Handwörterbuch der Praktischen Medizin.* Herausgegeben von Prof. Dr. Georg Klemperer und Prof. Dr. Felix Klemperer, Berlin. Vierter Band, Gelenkerkrankungen (chirurgisch)—Herzkrankheiten 1. Mit 209 bildlichen Darstellungen im Text und auf 13 farbigen und 5 schwarzen Tafeln. Berlin und Wien: Urban & Schwarzenberg. 1930. Price RM. 40.—

The fourth volume of this alphabetically arranged encyclopedia of practical medicine comprises subjects from Gelenkerkrankungen to Herzkrankheiten (Diseases of the joints to heart diseases). Each item is comprehensively dealt with, accompanied by illustrations where necessary, and literary references are appended. The work forms a complete course in practical medicine for those who read German.

### Brugsch: Progress in Medicine

*ERGEBNISSE DER GESAMTEN MEDIZIN. Unter Mitwirkung hervorragender Fachgelehrter.* Herausgegeben von Prof. Dr. Th. Brugsch, Dreizehnter Band. 1. Hälfte und 2. Hälfte. Berlin & Wien: Urban & Schwarzenberg. 1929. Price, geh. RM 30.—; geb. RM 35.—

Vol. 13 of this comprehensive work, by German and other authors and edited by Brugsch, contains 16 contributions. These include articles on acute and chronic middle ear suppurations, by Professor Brühl, of Berlin; on the salivary glandular secretion, by Professor Goljanitzki, of Moscow; on the treatment of allergic diseases, by Professor Storm, of Leiden; on lead poisoning by Professors Schmidt, Seiser and Litzner, of Halle; etc.

Physicians who read German will find this series very exhaustive and the various subjects treated authoritatively.

# MEDICAL NEWS



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## The Father of Local Anesthesia

The first Academy Medal, of the New York Academy of Medicine, was recently presented to **Dr. Carl Koller**, consulting ophthalmologist to Mount Sinai and Montefiore Hospitals, New York City, and the first man to use cocaine for local anesthesia (in 1884).

Dr. Koller was born in Bohemia, in 1857, and received his Doctor's degree in Medicine from the University of Vienna, in 1882. He came to the United States in 1888 and was naturalized in 1902.

The picture shows Dr. Koller holding the medal just after he received it.

## The Pharmacopoeial Convention

Attention is again called to the fact that the Eleventh Decennial Pharmacopoeial

Convention will meet in Washington, D. C., May 13, 1930, for the purpose of revising the Pharmacopoeia.

All organizations and agencies entitled to representation at this convention are urged to appoint delegates at once, if this has not been done.

For further information, write to Dr. Reid Hunt, President of the Convention, 240 Longwood Ave., Boston, Mass.

## Tribute to Prof. Pavlov

The issue of *The Bul. Battle Creek Sanitarium and Hosp. Clinic* for October, 1929, is a tribute to Professor Ivan P. Pavlov, the famous Russian physiologist, on the occasion of his eightieth birthday. It contains a number of articles dealing with his life and work, and several interesting portraits.

## Opening in Illinois

A town of 250 people, on the Illinois Central Ry., has been without a physician for five years and is eager to have one. The surrounding rural territory is thickly populated and prosperous. The nearest doctors are eight and fourteen miles away. There are several stores, restaurants and churches, as well as a bank.

This ought to be a splendid chance for a recent graduate who wants to be on a self-supporting basis at once.

For full particulars, write to Mr. Harry Jones, Janesville, Illinois.

## Dr. Hammann Passes

The passing, on Jan. 12, 1930, of Dr. Carl A. Hammann, of Cleveland, Ohio, was regarded as a municipal bereavement, for he seems to have embodied the highest ideals of the surgeon.

Dr. Hammann was born in Davenport, Ia., Jan. 26, 1868, and received his medical degree from the University of Pennsylvania in 1890. He was Chief of the Surgical Staff of the City and Charity Hospitals,

Cleveland, and was formerly dean of the Medical School of Western Reserve University.



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### Aero-Clinics

The Pan-American Medical Association held its annual meeting in Panama, Jan. 30 to Feb. 3, 1930.

A party of physicians from the United States, including Drs. Fred H. Albee, Wm. Sharpe and Charles J. Gratz, of New York City, Dr. Arnold H. Kegel, Health Commissioner of Chicago, and Dr. George H. Hawley, of Bridgeport, Conn., hopped off from Miami, Fla., on Jan. 25, to fly to this meeting, covering nearly 7,000 miles on the round trip.

On the southward trip the doctors visited cities in Cuba, Mexico, British Honduras, Honduras, Guatemala, Salvador and Nicaragua. Returning, they stopped in Columbia and Venezuela. At each stop, a clinic was conducted, showing diseases peculiar to the countries visited, in which the visitors participated with reports of recent scientific progress.

This is the first occasion when a group of physicians has flown to an important medical meeting. The picture shows the ship, the crew and the professional passengers.

The prize offers on page 6 of the January CLIN. MED. AND SURG. are worth studying.

### Campaign for Negro Hospital

The Provident Hospital and Training School, in cooperation with the University of Chicago, is launching a campaign for funds to provide training for Negro medical students and nurses and graduate train-

ing for Negro physicians, on a scale never heretofore attempted.

This worthy work should receive the support of all who are interested in the colored race. Full particulars may be had by addressing the hospital at 410 South Michigan Blvd., Chicago, Ill.

### U. S. Civil Service Examinations

The United States Civil Service Commission announces the following open competitive examinations:

#### Trained Nurse

#### Trained Nurse (Psychiatric)

Applications for trained nurse, and trained nurse (psychiatric) must be on file with the Civil Service Commission at Washington, D. C., not later than April 8.

The examinations are to fill vacancies in the Panama Canal Service.

#### Medical Officer

#### Associate Medical Officer

#### Assistant Medical Officer

Applications for the above-named positions will be rated as received by the Civil Service Commission at Washington, D. C., until June 30.

Full information may be obtained from the United States Civil Service Commission at Washington, D. C., or the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city.

### Stomatologists to Meet

The American Society of Stomatologists will hold its seventh annual meeting at the Hotel McAlpin, New York City, April 10 and 11, 1930. The program looks good.

For full particulars, write to Dr. Alfred J. Asgis, Secty, 509 Madison Ave., New York City.

### Postgraduate Course for Head Surgeons

Professor Georges Portmann will give a five-week, intensive postgraduate course in ear, nose and throat surgery, at the University of Bordeaux, France, commencing July 21, 1930. This course is open to American physicians.

For information apply to Dr. L. Felderman, Mitten Building, N. W. Cor. Broad and Locust Sts., Philadelphia, Pa.

# Send For This Literature

To assist doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE and SURGERY, North Chicago, Ill., will gladly forward request for such catalogues, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our readers may use these numbers and simply send requests to this magazine. Our aim is

to recommend only current literature which meets the standards of this paper as to reliability and adaptability for physicians' use.

Both the literature listed below and the service are free. In addition to this, we will gladly furnish such other information as you may desire regarding additional equipment or medical supplies. Make use of this department.

When requesting literature, please specify whether you are a doctor of medicine, dentistry, medical student, a registered pharmacist, or a nurse.

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| <p>A- 2 Your Prestige and Profit. 8-page booklet. The Carroll Dunham Smith Pharmacal Co.</p> <p>A- 3 Storm Binder and Abdominal Supporter. 4-page folder by Dr. Katharine L. Storm.</p> <p>A- 5 Ethical Medicinal Specialties. 8-page booklet. A. H. Robins Co.</p> <p>A- 17 An Index of Treatment. Burnham Soluble Iodine Co.</p> <p>A- 45 Vera-Perles of Sandelwood Comp. Paul Plessner Co.</p> <p>A- 47 Campho-Phenique in Major and Minor Surgery. Campho-Phenique Company.</p> <p>A- 49 The Calcreose Detail Man. Maltbie Chemical Co.</p> <p>A- 95 Everything for the Sick. Lindsay Laboratories.</p> <p>A-103 The Electron, March-April, 1930. McIntosh Electrical Corporation.</p> <p>A-116 Hemo-Glycogen, The New Product Hemoglobin Compound and Liver Extract. Chappel Bros., Inc.</p> <p>A-120 Building Resistance. William R. Warner &amp; Co., Ltd.</p> | <p>A-156 Siomine (Methenamine Tetraiodide). Pitman-Moore Company.</p> <p>A-176 The Hormone, 24 pages and cover, published bimonthly. The Harrower Laboratory.</p> <p>A-196 "Facts Worth Knowing." Intravenous Products Co. of America, Inc.</p> <p>A-236 Throughout the Span. Advanced Age. William R. Warner &amp; Co., Ltd.</p> <p>A-244 I Am Oxiphen! Pitman-Moore Co.</p> <p>A-256 The Modern Way of Giving Digitalis. Upsher Smith Co.</p> <p>A-258 Prophylaxis. August E. Drucker Co.</p> <p>A-262 Journal of Intravenous Therapy, March, 1930. Loeser Laboratory.</p> <p>A-268 Eat Uncle Sam Health Food. Uncle Sam Breakfast Food Co.</p> <p>A-269 Special Course No. VI Traumatic Surgery. Illinois Post Graduate Medical School, Inc.</p> <p>A-271 The Intestinal Flora. The Battle Creek Food Company.</p> <p>A-286 Ultra Violet Therapy in Your Office. A. S. Aloe Co.</p> <p>A-292 Acidosis and Infection—Alka-Zane. William R. Warner &amp; Co., Inc.</p> |
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- A-301 Merrell's Salicylates. The Wm. S. Merrell Company.
- A-310 Conclusions from published research of the value of Ceanothyn as a hemostatic. Flint, Eaton & Co.
- A-318 Blood Clinical and Laboratory Diagnosis. A book of 160 pages by Henry Irving Berger, M.D., Battle & Company.
- A-335 The Bloodless Phlebotomist. The Denver Chemical Manufacturing Company.
- A-336 The Secret of our Digestive Glands. J. W. Wuppermann Angostura Bitters Agency, Inc.
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- A-366 Iodotherapy by Harry J. Novack, M.D. Colloidal Laboratories.
- A-369 Burdick Zoalite Series for Infra-Red Therapy. The Burdick Corporation.
- A-371 The Use of Sulphocyanate of Soda in High Blood Pressure, reprint from The Canadian Medical Assn. Journal. The Tilden Company.
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